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No. 3186.—Vol. LXVI.

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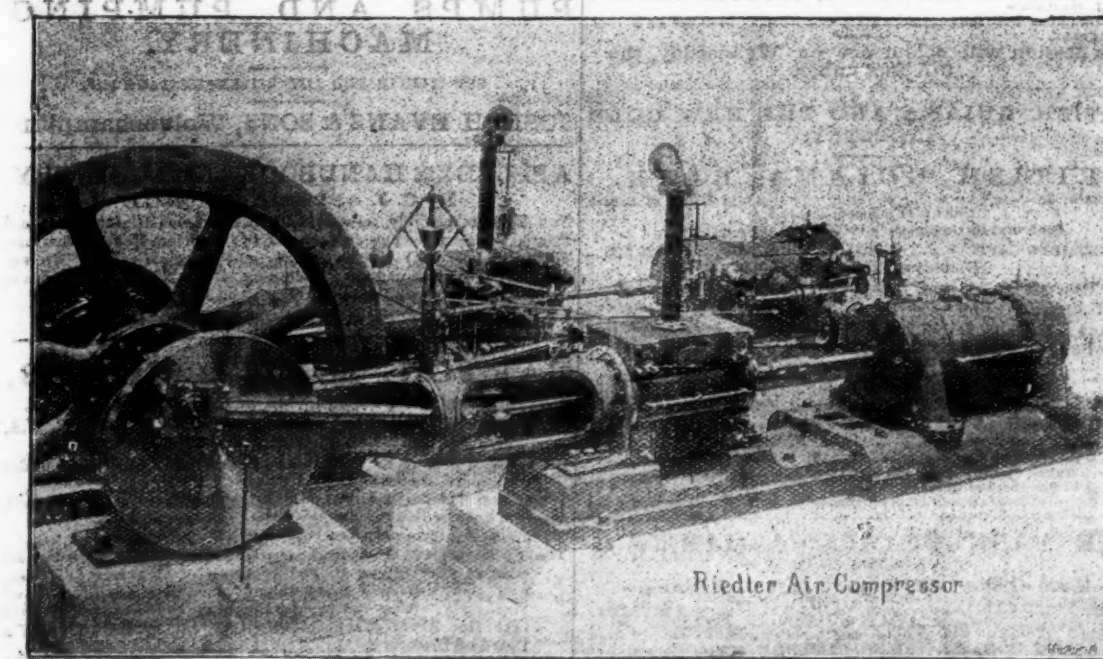
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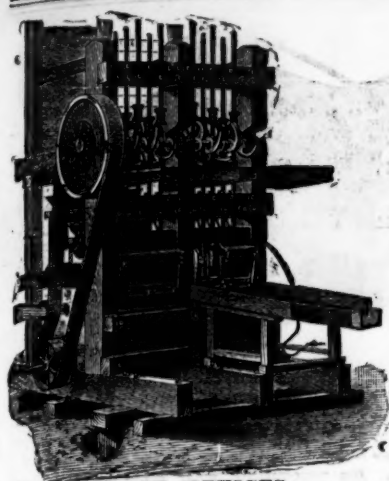
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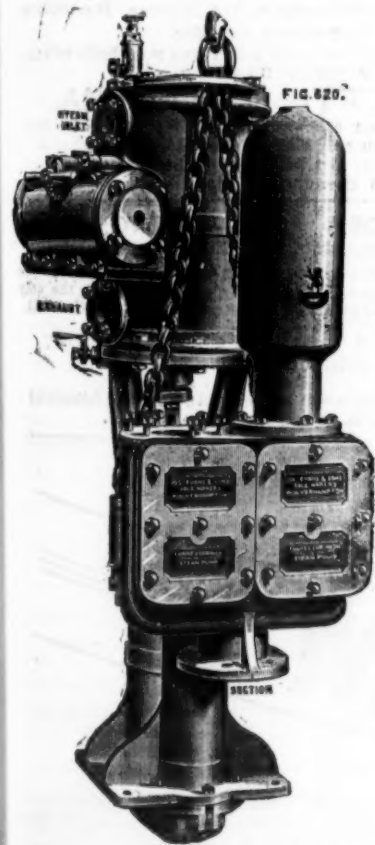
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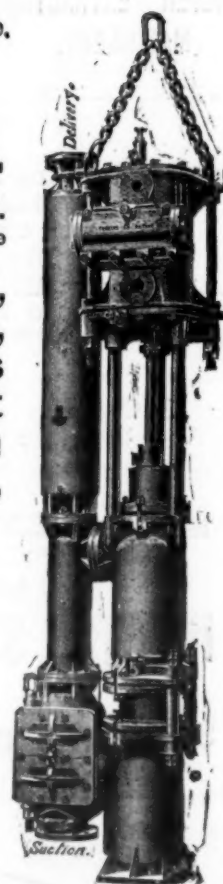
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FIG. 875, "FLUOMETER" PATENT STEAM VACUUM PUMP.

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The "DUPLEX" STEAM PUMP.  
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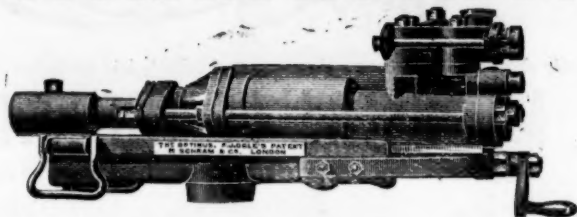
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"STRAIGHT-LINE" PATTERN SINKING PUMP



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## "OPTIMUS" COMPOUND ROCK DRILL.

(P. J. OGLE'S PATENT.)

Consumes 40 per cent. less Compressed Air than any other Drill at the same time giving the most effectual results.

### AIR COMPRESSORS,

WITH COMPOUND AIR AND STEAM CYLINDERS,

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SUPPLIED TO THE INDIAN, COLONIAL, AND OTHER GOVERNMENTS.

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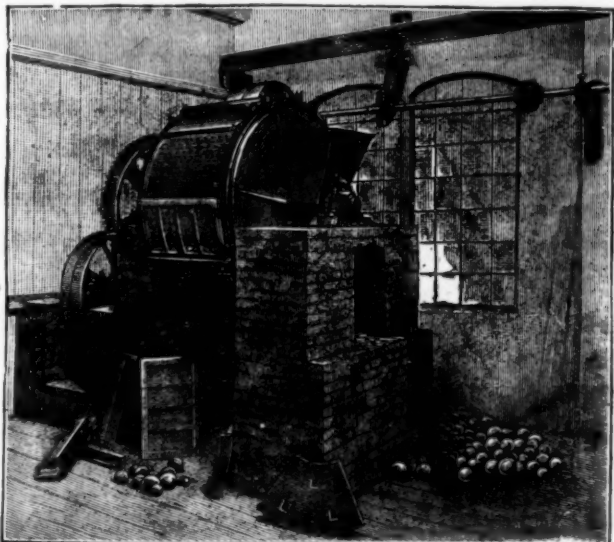
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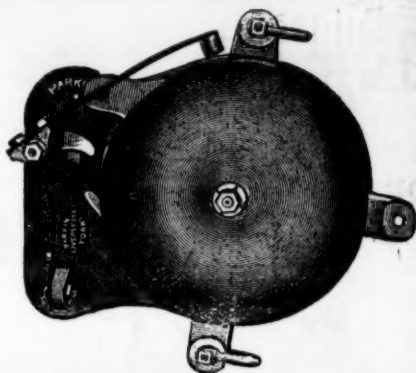
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3. Disintegrating Machinery of all kinds, such as Patent Ball Mills for Ores, Quartz, Cement, Basic Slag Grinding, &c. Excelsior Mills for Food Products, also for Tanneries, Chemical Factories, Sugar Factories, &c. Stone Breakers, Roller Mills, Crushers, &c., &c., Runners.
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Specially devoted to Cornish Mining, upon which it contains the fullest and most reliable information published. It is the only eight-paged newspaper printed in the Mining Division of Cornwall.

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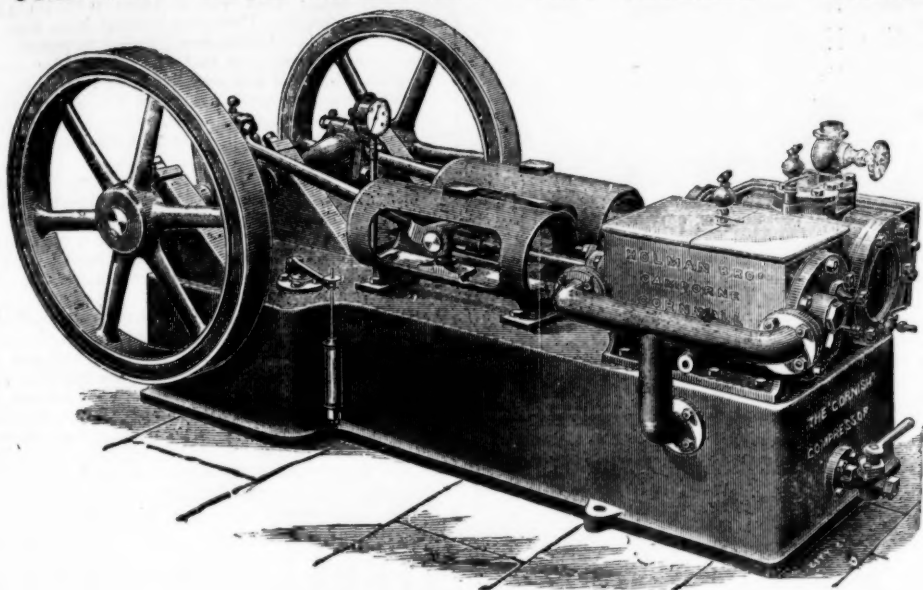
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At Botallack Mine, St. Just, Cornwall, **TWELVE MEN** with **TWO** new Patent **CORNISH ROCK DRILLS** drove, sunk, and rose **288 FATHOMS** in **12 MONTHS**, equal to five times the Speed of Hand Labour

At Wheal Grenville Mine, Camborne, Cornwall, **SIX MEN** with **TWO** new Patent **CORNISH ROCK DRILLS** started from the **150 FATHOMS** level and put up in **EIGHT MONTHS** a **11 FEET** by **5 FEET** PERPENDICULAR RISE **46 FATHOMS 5 FEET 6 INCHES**, and about midway drove **1 FATHOM 5 FT.** No communication of any kind was effected until holing to the Shaft brought down from surface.

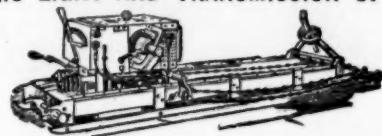
Estimates for **ROCK BORING PLANT** and **GENERAL MINING MACHINERY** on Application.

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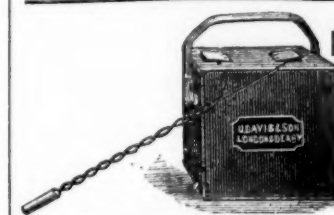
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ELECTRIC LIGHT AND TRANSMISSION OF POWER.



Jeffrey Machines for Undercutting Coal,  
WORKED EITHER BY COMPRESSED AIR OR ELECTRICITY.  
**OVER 600 IN DAILY USE.**



**ELECTRIC  
BLASTING APPARATUS.**  
HIGH OR LOW TENSION  
**EXPLODERS  
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and  
Telephones.**

**MINING AND  
SURVEYING INSTRUMENTS,  
THEODOLITES, HEDLEY  
DIALS, LEVELS,  
CLINOMETERS.**

**MINERS' SAFETY LAMPS.**  
ALL PARTS INTERCHANGEABLE.

CATALOGUES UPON APPLICATION.

Sec. A. MATHEMATICAL & MINING INSTRUMENTS, MINERS' LAMPS, &c.  
Sec. B. ELECTRICAL PLANT AND STORES.

**WATER-POWER.**  
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Hett's Patent Pelton Wheels.  
**CHAS. LOUIS HETT,**  
HYDRAULIC ENGINEER,  
BRIGG, ENGLAND

**AWARDS:** CRYSTAL PALACE, 1890; TASMANIA, 1891; KIMBERLEY, 1892.

# CONCENTRATION.

**The Clarkson-Stanfield Ore Reduction Co. (Limited).**

In the **CLARKSON-STANFIELD** process of Concentrating Refractory and Complex Ores no water is required; dust is reduced to a minimum; the loss of Mineral through water-borne Slimes is obviated.

**OUTPUT 1 TO 2 TONS PER HOUR, ACCORDING TO SIZE OF MACHINE.**

CONCENTRATOR TO BE SEEN IN OPERATION AT THE COMPANY'S ONLY ADDRESS.

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The Machine is superior to Sieves for Sizing Homogeneous Substances, such as Emery, Sand, and Powders, and may be used to great advantage in the preparation of Ochre.

N.B.—The owners of the Carndochan Mine, near Bala, North Wales, will, by arrangement, show their **CLARKSON-STANFIELD** plant working on a Refractory Low Grade Gold Ore.

## NEW PATENTS.

LIST OF APPLICATIONS for New Patents relating to Mining Metallurgical, Engineering, Railway and kindred matters, specially compiled from official sources for the "Mining Journal" by Messrs Rayner and Company, Patent Agents, 37, Chancery Lane, London, W.C., who will forward all information regarding them free on application.

- 10087 John William Hunter, 45, Southampton Buildings, Chancery Lane, London.—Improvements in rotary engines.—August 24.
- 10767 George William Hart, 111, Hatton Garden, London.—Improvements in or relating to gas motor engines.—August 25.
- 10774 James Henderson, 70, Chancery Lane, London.—Improvements in or relating to the furnaces of steam boilers.—August 25.
- 10804 William Albert Jordan and Belts and Jordan, 57, Chancery Lane, London.—Improvements in steam engines.—August 25.
- 10805 John Henry Holman and James Miners Holman, 4, South Street, Finsbury, London.—Improvements in rock drills.—August 25.
- 10820 Louis William Garnett Flynt and Alfred Cotton, 8, Lombard Chambers, B-14th Street, Liverpool.—Improvements in and connected with the stoking of furnaces.—August 27.
- 10863 Nelson Anderson and Gooden (Limited) and Jorgen Bjornstax, 47, Lincoln's Inn Fields, London.—Improvements in engines operated by steam or other expandable fluid.—August 27.
- 10900 James McGowan McCulloch, 6, Lord Street, Liverpool.—Improvements in steam boilers.—August 27.
- 10961 Edmund Edwards, 45, Chancery Lane, London.—Improvements in apparatus for equalising the pressure upon the crank pins of steam and other engines.—August 27.
- 10963 Thomas Murphy, 45, Southampton Buildings, Chancery Lane, London.—Improvements in furnaces for steam generators.—August 28.
- 10773 John Y. Smith, 45, Southampton Buildings, Chancery Lane, London.—Improvements in steam and other fluid pressure engines.—August 28.
- 10134 Wilhelm Otto Axel Lowe, 6, Lord Street, Liverpool.—Improvements in or appertaining to boiler furnaces, and other furnaces or flues.—August 29.

AN INTERESTING CATALOGUE.—We have received a copy of Section A Catalogue, issued by Messrs. John Davis and Son, of All Saints Works, Derby, which we find interesting, and more comprehensive and detailed than previous editions. This firm is gradually finding out the valuable properties of aluminium, and it is to be noticed that their experiments have proved it to be invaluable for surveying instruments. Among the minor improvements in instruments, celluloid faces for anerometer and other dials have been substituted for silvered metal, and the needles and inner faces of the sights of miners' dials have been treated with a dead black which facilitates the task of reading under ground. The catalogue likewise includes representations of several designs of miners' safety lamps, likewise many inventions and improvements in apparatus and appliances for the safe working of mines. A new and important feature is that the principal instruments and apparatus have attached to them in the catalogue a cable code for the convenience of the firm's foreign connection.

## JOINT-STOCK COMPANIES.

### NEW REGISTRATIONS.

THE following are among the joint-stock companies registered at Somerset House since our last notice:—

- First Find Consolidated Gold Mines (Bulla Bulling), Limited.—Registered September 1 by Parker, Garrett and Holman, St. Michael's Hill, Cornhill, E.C. Capital £100,000 in 100 shares. Objects: To adopt and carry into effect an agreement expressed to be made between the South Londonderry Gold and Exploration (Limited) of the first part, and this company of the other part, for the acquisition by purchase or otherwise of the business and undertaking of the said company, and to acquire any other mines, mining water and other rights, grants, leases, claims, concessions, options of purchase, &c., in West Australia. Registered office, 11, Queen Victoria-street, E.C.
- Manchester Tube Syndicate (Limited).—Registered August 31 by H. Stanley Sugden, 10, Ironmonger-lane, E.C. Capital £12,500 in £1 shares. Objects: To carry on in all or any of their respective branches, the businesses of steel nut and tube makers, as now and hitherto carried on at Open-haw, in the county of Lancs., under the style or firm of the Manchester Steel Nut and Tube Company, also as hydraulic and marine engineers, steel and shafting manufacturers, bridge builders, implement makers, locomotive and wagon builders, tool makers, boiler makers, iron, copper and brass foundries, smelters and workers; as colliery proprietors, brick and tile makers, millwrights, blacksmiths, steel converters, steel rollers, iron and steel plate manufacturers, iron and steel cable manufacturers, shipbuilders, consulting engineers, and to construct and maintain rail and tram roads, &c. Registered office, High Bank Steel Works, Openshaw, Lancs.
- Anglo-Foreign Exploitation Syndicate (Limited).—Registered August 31 by Deacon, Gibson, Medcalf and Goddard, 9, Great St. Helen's, E.C. Capital £50,000, in £1 shares, of which 20 are deferred.
- General Works Construction Company (Limited).—Registered September 1 by Jacques and Co., By Place, E.C. Capital £200,000, in £10 shares. To construct, erect, carry out, equip, acquire, own, maintain, work, develop, and administer either in the United Kingdom or elsewhere public works and conveniences of all kinds, including railways, tramways, roads, tunnels, harbours, docks, shipways, shipping places, piers, jetties, wharves, staiths, quays, canals, reservoirs, embankments, irrigation reclamation, improvement, sewage, drainage, sanitary, water, gas, electric light, telephonic and power supply works, houses, offices, hotels, warehouses, markets, public buildings, and all other works of convenience of public utility.
- Empire Corporation (Limited).—Registered September 2 by Parker and Parker, J., Clement's Lane, E.C. Capital £150,000, in £1 shares. To acquire grants, concessions, or leases of any lands, mines, or other properties supposed to contain minerals or precious stones or any substances of value whatsoever, or any interest held therein, and also any freehold, leasehold, and other farms, lands, properties, &c., in Australasia, British Columbia, Africa, or elsewhere.
- British Dominions Exploration (Limited).—Registered September 2 by Parker and Parker, J., Clement's Lane, E.C. Capital £250,000, in £1 shares. To acquire any mines, mining rights, claims, protected areas, ores, minerals, tailings, concentrates, alluvial deposits, forests, water rights or grants, lands, hereditaments, easements, or premises in any part of the British possessions or elsewhere.
- Jindasay's Find Proprietary (Limited).—Registered September 3 by Ashurst, Morris, Crisp and Co., 17, Throgmorton Avenue, E.C., with a capital of £10,000 in £1 shares, to acquire gold and other mines, mining rights, &c., in West Australia.
- Farrer's South African Syndicate (Limited).—Registered September 2 by Arnold, Williams, and Co., the Vestry House, Laurence Pountney Hill, E.C., with a capital of £1000 in £1 shares, to acquire any mines, mining rights, &c., in South Africa or elsewhere. Registered office, 37, Queen Victoria St. E.C.

## CONTRACTS OPEN:

FOR MINE, QUARRY, RAILWAY, AND ENGINEERING WORK, STORES, &c.

\*We shall be obliged by being promptly placed in possession of particulars regarding contracts open for competition, and of the results of successful tenders. In the latter case contract prices should be given.

The date given is that by which tenders must be delivered, in nearly all cases further information can be obtained on application at the addresses given. In applying for such the name of "The Mining Journal" should be mentioned as the original source of the information, concerning which further particulars are required.

Points and Crossings September 15 (Leeds).—For the supply of a number of steel springs and open points, crossings and drain rails, for the Leeds City Tramways. Particulars may be obtained at the Highways Department, Whitehall Road, Leeds. Tenders, endorsed "Points and Crossings," and addressed Highways Committee, Town Hall, Leeds, must be sent in by 15th inst.

Steel and Iron Materials. September 16 (London, E.C.).—For the supply and delivery of steel and iron materials for bridges, for the East Indian Railway Company, as per specification to be seen at the company's office. Tenders to be sent to Mr. A. P. Dainton, secretary, Nicholas Lane, London, E.C., marked "Tender for Steel and Iron Materials for Bridges," not later than 1 p.m. on 16th inst. The company reserves to itself the right to divide the order, also to decline any tender without assigning a reason. For each specification a fee of £1 is charged, which cannot under any circumstances be returned.

Wheels and Axles. September 13 (India Office, S.W.).—The Secretary of State for India in Council is prepared to receive tenders to supply (1) steel wheels and axles, (2) brass boiler tubes. The conditions of contract may be obtained on application to the Director General of Stores, India Office, Whitehall, S.W., and tenders are to be delivered at that office by 2 p.m. on 15th inst.

Coal and Coke. September 17 (Aylesbury).—For the supply of coal and coke to the sewage works, baths, and offices for half-year ending March 1, 1897, for the Aylesbury Urban District Council. Further particulars and form of tender may be obtained on application to Mr. J. H. Bradford, surveyor to the Council, 2, Rickford's Hill, Aylesbury.

Tyres. September 16 (London, E.C.).—For the supply and delivery of 200 steel tyres and 100 groups elliptical springs, for the Mexican Railway Company (Limited). Specifications, with conditions and form of tender, can be obtained at the company's offices on payment of 5s. each, and drawings may be inspected between 10 a.m. and 5 p.m., Saturdays excepted. Tenders must be delivered by noon on 16th inst. Mr. John T. Dainton, secretary, 45, New Broad Street, London, E.C.

Railway Stores. September 16 and 23 (Brussels).—For supply of all kinds of stores and parts necessary for renewals of roads and rolling stock on the Belgian State Railways. Particulars are obtainable at the Brussels Bureau. Tenders by 16th and 23rd inst.

Coal. September 23 (Belfast).—For supply of 75,000 tons of best screened coal, to be delivered free and trimmed in barges at Belfast Harbour, between November 1, 1896, and October 31, 1897, for the Gas Committee. No tender for less than 10,000 tons will be considered. Monthly quantities and particulars may be obtained from the manager of the gasworks. Tenders, on office form, endorsed "Tender for Coal," should be delivered to Sir Samuel Black, Town Clerk, by 23rd inst.

Railways. October 31 (Sofia).—For the construction of a railway between Nova Zagora, Chirpan, Philippopolis, Tatar Basarjik, and Sarembeg. About 120 miles. Estimate £532,000. Particulars from the Ministry of Public Works Sofia, Bulgaria.



## MINING IN ASTURIAS (SPAIN).

## IRON ORES OF THE PROVINCE.

(FROM OUR OWN CORRESPONDENT.)

REFERENCE having been made on a former occasion in the Journal to the iron ore deposits of this province, it may be well to enter more fully into the matter with a view to making them better known, so that the exploitation of these deposits may be taken in hand by those who, after due examination, may find it worth their while to secure properties, and draw from them a portion of their requirements.

The ore from these various beds and deposits forms the staple basis of working in the several iron and steel works of the province. These works are not unimportant, as may be seen from the following table of their production during the last year:—

Name of Works.	Pig Iron. Tons.	Steel. Tons.	Finished Iron. Tons.
Sociedad Fabrica de Mieres ..	18,000 ..	—	13,102
" Duro and Co., .....	21,530 ..	10,163 ..	10,700
Moreda and Gijon ..	12,000 ..	—	8,000

The Fabrica de Mieres turns out girder and angle iron, bars, plates, and hoop iron.

rubio and Campanil ores; whilst the balance in Duro and Co.'s works is filled with ore drawn from extensive deposits at Bayo, in this province.

The Bayo ore is that of the colour of that of the Somorrostro Campanil of Bilbao, mostly granular; it is drawn without much care, and a good deal of country gets intermixed.

General samples, drawn from the carts as they passed along the road to the railway station, gave the following assay:—

Iron peroxide ..	65.56 = 45.89 iron.
Silica ..	5.59
Phosphorus ..	nil.
Sulphur ..	nil.
Lime carbonate ..	23.70
Combined water ..	5.15

whilst samples taken in the cuttings in the mines gave iron 54 per cent., with 6 per cent. silica, and the remainder lime, carbonic acid, and water.

The flux in the district of these works has a proportion of magnesia, and therefore the greater portion of the phosphorus is eliminated in the blast furnace. That such is practically the case is proved by the fact that best hoop iron is made at the Mieres Ironworks from puddle bar cuttings direct, and in passing the fingers along the edges of this no jaggedness can be noted, as would be the case in the presence of either sulphur or phosphorus.

It is not necessary to enter into details of strains and stresses

placed on board, once that the deposits are opened out and the necessary arrangements for shipping made.

In order that an opinion may be formed as to the importance of these beds, the accompanying map of the district shows their general run, the thick lines marking their croppings. These lodes are comprised of extensive sea beaches of the Devonian period, tilted, folded, and contorted by the various movements of the earth's crust since they were first laid down. We see the same operation in effect in the present New Zealand beaches, so far as the agglomeration of magnetic iron particles, the difference being that whilst these particles proceed from Archæan rocks, the Devonian beaches have been charged by iron protoxide in solution, precipitated as peroxide in presence of decaying carbonaceous matter. The *modus operandi* of the deposition of iron in this way has been treated very fully in the chemical and geological assays of Dr. Sterry Hunt, and in walking over and examining these deposits with their enclosed fossils, the conclusion is come to that his decisions are fully proved.

These lodes or deposits, tilted nearly vertical, are met with on the coast at Llumieres to the west, and at Candas on the east of the anticlinal, whose axis is at the Vaca de Luanco. Surface erosion has levelled the general topographical features of the apex of this, the eroded matter having been transported from west to east, filling the valleys that existed on the eastern side.

At Llumieres, the Duro Company have worked for a long series of years drawing the ore for their requirements.

At Candas, the ore lodes are intact, and are seen in the almost vertical cliff face, running from sea level to the top of this, an altitude of over 50 metres. The contents of the ore at Llumieres and on the Candas run are almost identical, although that of Llumieres has a higher percentage of combined water.

Both when wet have a rather regular rhomboidal fracture, but this disappears when they are worked out from dry places, the fracture then being irregular or partly conchoidal.

(To be continued.)

## MINING IN CORNWALL

## AND DEVON:

## NOTES ON MINING IN THE WEST.

(FROM OUR OWN CORRESPONDENT.)

THE only mine meeting held during the week has been Levant the sole survivor of the once flourishing group of St. Just mines. Levant, like the Eastern mines, has felt the results of the depression, and on Tuesday the adventurers wisely decided to wipe off the adverse balance—the accumulation of several excessive accounts—by a call of 5s. per share. This is the first call made at Levant for several years, so that the shareholders are in more fortunate case than the majority of those who are interested in other Cornish mines. At the same time, it is distinctly disappointing, that a mine which in 16 weeks has raised and sold 125 tons of tin, 1400 tons of copper, and 55 tons of arsenic, is not able to pay its way. If Levant depended on its tin alone, operations might be stopped to-morrow. It is the fact that the adventures have two—or rather three—strings to their bow; that makes their position so strong. Levant is now far and away the largest copper-producer in the British Isles—turning out more ore than all the other mines put together. The agents announce, however, that the copper lode in the bottom of the mine is getting slightly mixed with tin, and it is possible that the production of copper will gradually fall off as the mine is developed in depth, while that of tin would increase. Should this turn out to be the case, the experience of the Eastern mines will be repeated at Levant.

ACCORDING to Mr. Henry Olds, the appointment of a committee has been of distinct benefit to the shareholders. To them he attributes the adoption of ticketing—thanks to which the price realised for the company's tin ore has risen from £37 2s. 6d. per ton to £39 11s. It used to be said, in the old days of private sales, that smelters fought shy of Levant tin, but at the recent ticketings it has fetched a higher price than the produce of most other mines, so the stone which the builders rejected has become the head of the corner. Shareholders in Levant will probably feel keen regret that the mine's ore was not ticketed long ago.

CAPTAIN MURRISH, one of the underground agents, had some good news for the adventurers, which probably partially reconciled them to the 5s. call. He announced that an important improvement has taken place in the 302, which he hopes will be permanent. The mine is certainly being worked with vigour, and is likely to survive its near neighbours for many years yet.

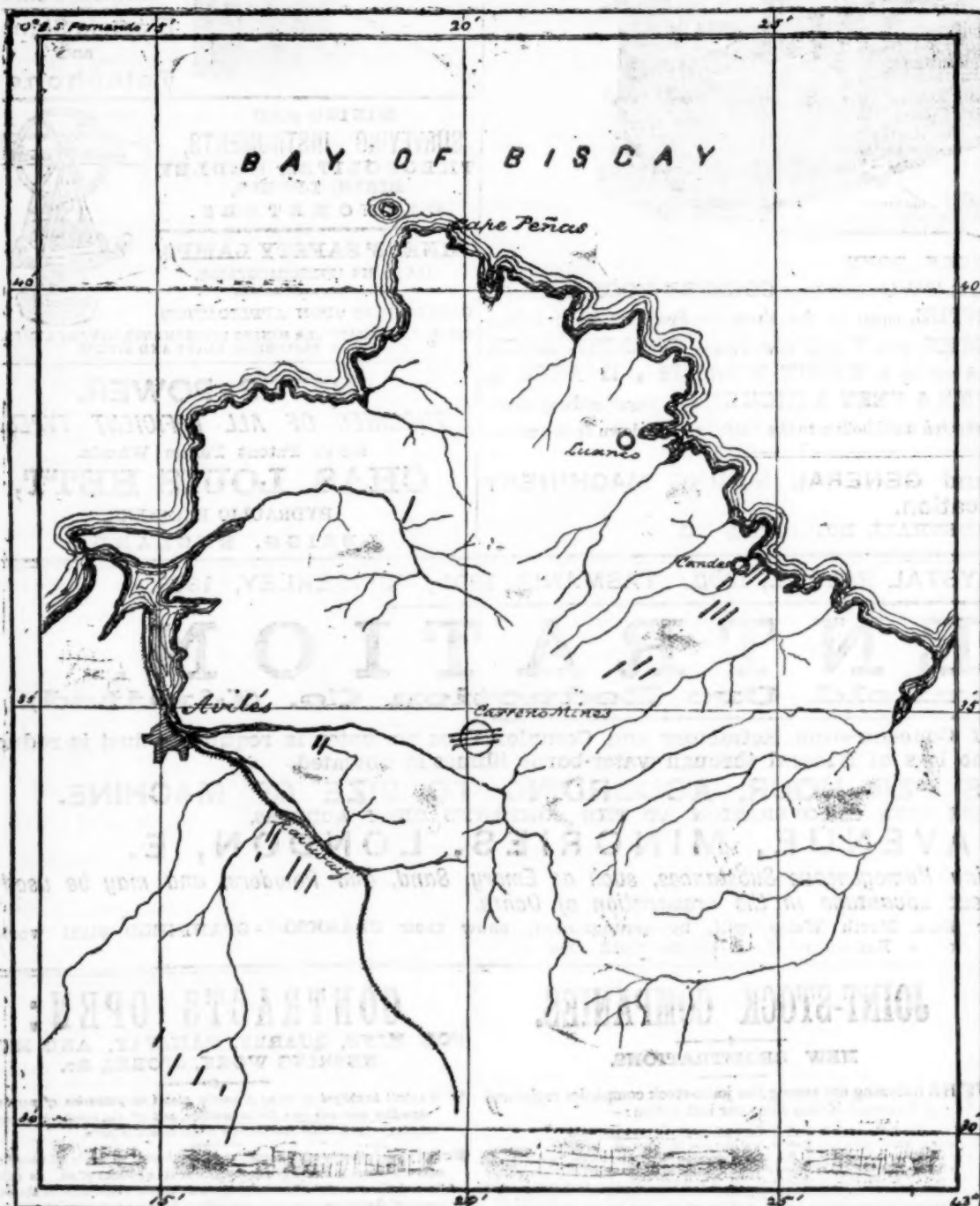
MR. FRANK OATS, who is largely interested in Levant, as well as in the Basset mines, is on the point of paying another visit to South Africa. Cornish mining owes a good deal to Mr. Oats, who has been one of the most active and uncompromising advocates of the new order of things now fairly inaugurated.

THE statutory meeting of shareholders in Carn Brea and Trecroft (Limited) will be held on the mines on the 18th inst. It is stated that the directors have already secured a sum of something like £60,000 for future developments, and that work will be vigorously pushed forward without delay.

THE report of the liquidator of the old Wheal Basset Cobalt-ore Company is a very satisfactory document. The mines were taken over by the new Limited company on February 7, and the accounts represent the working up to that date. There is an apparent loss of £113, but about £400 comes back from the new company for coal in stock, and £800 paid for land damage is an extra charge in the accounts. To the balance shown in favour of the company has to be added £1998 which comes from the new company for exploring work underground, and for coal and new materials taken over in accordance with the agreements made with the amalgamated company. This brings the available balance up to £5315, but out of this balance various costs in connection with the winding-up of the company have to be met.

FOREIGN COMPETITION IN THE COLONIES.—During the last fortnight there have been over 1000 visitors to the London Chamber of Commerce in Eastcheap to inspect the sample collection from the British West Indies of foreign articles which find a sale in those markets, and which were sent home in response to Mr. Chamberlain's despatch to the Colonial Governors. It was originally announced that the exhibition would close last Saturday, but in consequence of the great attention which the samples have attracted, and to the fact that the attendance has increased rather than diminished, it has now been decided to continue the exhibition until to-day (Saturday).

THE directors of the Cataract Barberton Gold Mining Company (Limited) announce that they have been advised that the property has been transferred to the company's representatives.



Duro and Co., in addition to the above, manufacture steel girders, angles, and plates for admiralty uses.

Moreda and Gijon have one blast furnace to supply pig iron for the manufacture of telegraph wire, rods, and wire for their nail works, which is a most important industry in this country, yielding excellent results.

In addition to the ore used in these works, there were shipped to Rotterdam as an assay 4335 tons from the Carrero Mines, at a price of 5s. per ton f.o.b. Gijon.

To produce the above quantities of pig iron, 65 per cent. of the uses of the blast furnaces consisted of ores from this province, having the average assay as follows:—

Peroxide of iron ..	64.24	= 50.98 per cent. iron.
Protoxide of iron ..	7.42	
Peroxide of manganese ..	0.95	
Alumina ..	3.65	
Lime ..	1.60	
Phosphoric acid ..	1.28	= Phosphorus, 0.56
Combined water and C.O <sub>2</sub> ..	3.10	
Insoluble matter ..	16.20	

a portion replaced occasionally by the magnetic iron slaty ore from Tapia (also in this province) giving the following average assay:—

Silica ..	11.00	
Alumina ..	2.26	
Peroxide of iron ..	74.28	= iron 52 per cent.
Manganese oxide ..	5.46	= manganese 4.28 per cent.
Lime ..	2.30	
Magnesia ..	0.10	
Phosphorus ..	0.92	
Sulphur ..	0.19	
Combined water ..	3.40	

The remainder in the Mieres works being made up of Bilbao

of the finished iron, such as angles and girders, used for bridges, flooring, beams, &c., as these will compare favourably with those of any other country; but it may be well to impress the fact that this finished iron proceeds from ores of the above analysis, which, as a rule, are rejected in other countries for good finished iron. Of course the high silica percentage augments the cost of smelting, but the protective tariffs of the country permit this, as there can be no competition from outside.

Although the importation tables of the country show a certain amount of iron introduced, this consisted exclusively of manufactured articles, and a comparison of the statistics for the last two years proves that even this is dying out.

They are as follows:—

Class.	1894. Tons.	1895. Tons.
Cast iron .....	25,303	12,385
Finished cast iron .....	9,648	7,768
Rolled steel .....	23,142	18,233

Thus it may be seen that the manufacture of iron in this country is a progressive industry, and a highly beneficial one, in view of the low cost of the raw material, low rate of wages, and the selling price of the finished product, free from competition.

These ores enter largely into the production of the pig iron used at Duro and Co.'s Works in their Siemens-Martin furnaces, for the manufacture of steel plates and girders for Admiralty uses.

These before acceptance under their contracts have to withstand the very severe tests applied, which they do very successfully, there being probably as few rejects as in any other country under like conditions, but where all such material is manufactured from special pig iron, made from high class ores.

These facts speak volumes in praise of these provincial iron and steel works, and may be taken to heart by British manufacturers, in view of the low price at which these ores can be



# MINING IN VICTORIA.

(FROM OUR OWN CORRESPONDENT.)

## London-Victorian "Floats."—A London Reporting Association Necessary.

THE time, labour, capital, and perseverance required to bring a mining enterprise into a profitable state, as a safe and general rule, is immensely greater than in any other pursuit. Large sums of money require to be expended, as experience teaches, before the hope of remuneration is entertained. This fact is well understood by many mining companies in our midst. In such instances, the first object has been properly to construct the mine and equip it for future operations. In those instances where operations have been carried sufficiently far a handsome remuneration is already obtained. In others the most flattering prospects are presented, and the hard fact learned by Victorian mining is that mines, as a general rule, do not become profitable until they are properly constructed and equipped. The above remarks give a condensed view of the legitimate enterprises as relate to such mines as the Long Tunnel, Wahalla, the Garden Gully, Bendigo, the Band and Albion, Ballarat, and Mr. George Lansell's No. 180 at Bendigo, with a score or two of others scattered over the colony. Not a penny of English capital has been brought into these ventures—neither is it wanted. This is legitimate mining. On the other hand, I purpose dealing in this article with the bastard class of operations peculiar to the very large majority of Victorian ventures now on the London market. A London "boom" is on. On the list in front of me as I write are the names of some 83 ventures which have been sent to London within the last three months, and a further list of some 23 Victorian companies which have taken the necessary powers from local shareholders to increase their share capital and to open London registers. Both groups comprise several Tasmanian properties floated during the present Tasmanian "boom" in Melbourne. Looking over the list I see no reason to discriminate in my remarks between one and the other; if anything, those ordained to open London registers are the worst. For the benefit of the doubt has in all cases been taken by the proprietors, where possible to "float." The gentlemen who are slipping off with carpet-bags in hand by each mail steamer to London are pursuing mining, as it were, by a short cut. They are men of good wind, and plenty of it, a tropical imagination, and a keenness of eye, which can see a thing where it does not exist—men, too, who are not tarnished with the plain, homespun, frank address of sturdy honesty. At no period of Victorian mining have the snares been carried to such a degree as have found a lodgment in the methods prevailing for putting off Victorian and Tasmanian mines in London. All stimulated and fostered by the enormous sums paid for Western leases in London; and be it remembered that most of these properties were originally owned by Victorian people—therefore it is not difficult to trace the contagion. The Hon. Mr. Shiels, ex-premier of the colony, addressing the Victorian Legislature a few nights back on the Companies Amendment Bill, said:—"I blush with shame as I read the prospectuses that went abroad. Some of them from Victoria were advertised in the English papers, and drew millions out of the duped public of England. The wildest of wild cat schemes were being floated in England." The Hon. Mr. Foster, the Minister of Mines, speaking at several of the mining courses during the Parliamentary recess, bitterly complained of the character of the mines that were being sent to England for flotation. Replying to attacks of the local Press for presuming to discourage hope, and extinguish expectation of gain, he claimed to speak out of due consideration for the colony and its principal industry, and knowing as I do what, in his capacity as Minister, he must know, his outspokenness is most praiseworthy.

In no other department of State is a Minister hampered by political pressure and the immense temptations which beset the path of a conscientious man as at the Mines Department. We have had men like the Hon. Mr. Outtrim, who, from the moment they went to the mines office, severed their connection with all companies, and divested themselves of every mining share they held, and again in the present Minister, Mr. Foster, who pursues a similar course. Both have handled the reins of office as an important enterprise, and not a bubble. Consequently, when a Minister is fearless enough to tell the world a bit of his mind concerning some of the ventures that have been sent to England for flotation, he brings such discordant material into play as to bring down on him a maelstrom of enmity, collision, and ruin. Mr. Foster's reflections on the mines that have been sent home were made in the best interests of the industry and the colony, for in connection with some that are being introduced on your side under the auspices of leading Victorians, there is no censure that is too severe. They belong to a class from which it will be difficult to judge legitimate operations by being purely of a scheming and speculative character.

The Mining Journal will not justify its existence here or serve any good purpose to the English public who look to its columns for correct reports, unless it cuts out the cancer which is eating into the vitals of legitimate mining. I refer particularly to "expert" reports. I am not disposed to reproach or criminate where it is not justly due, but at the same time I observe a condition of things which cannot be allowed to pass unnoticed, even though it may prejudice the private interests of friends, acquaintances, or individuals. In the rush that is taking place to London, over and over again I have said to certain consulting engineers, whose characters and abilities are beyond question, "How comes it you people are not engaged to report on the London 'floats'?" The replies are invariably the same. Most of the mines are being taken home by the carpet-bag men, and they want a good report. A man must sacrifice his character and honour to obtain their favours. I speak with a full knowledge of the facts that fully nine-tenths of the properties going home are being reported on by men who are not heard of in the profession locally, and who are not competent to give an intelligent description of the ground they walk over or what they might see in the mine. They cannot convey ideas of how the work has been carried on, or tell how and where to supply the imperfections. With them, had all gone well at the mine, and with a full conviction of its glorious future, confident of its being able to pay dividends, they leave nothing in this respect to tell its

owners. The success of some "wild cats" that were taken home last year, the game is being played faster than ever. The Tasmanian mines floated in Melbourne during the recent Tasmanian "boom" are added to the list. The Minister of Mines is being urged to check the torrent of deceit and fraud upon the English public by establishing a Mines Bureau in London, where all information concerning Victorian mines may be accessible to the public, or give official sanction to a reporting association proposed to be established by those consulting engineers, who keep aloof from dubious concerns. Looking at the position from a practical standpoint, it would be infinitely better for the Minister to aid the project of the engineering body, for apart from recording full and

accurate information of the mines on the market, they are able to furnish scientific and practical advice in reference to them. The only obstacle in the road to the scheme of the engineers being carried out is the cost of maintaining the London Bureau, which could hardly be expected to be self-supporting at the start; help would be required till such time as it will have gained the confidence of the investing public.

It is certainly not going too far to say that the moral effect of such an organisation in London will render promoters cautious and circumspect in not holding out extravagant prospectuses, when conscious that the means are at hand to check deceit. Victoria has her chance now, and for the nonce is abusing it badly, and this equally applies to those Tasmanian ventures which are going home through Melbourne agencies. In putting money into these concerns English investors are in peril, for, apart from looking too narrowly into the merits or demerits of the enterprise, the one thing that can be said in truth and safety concerning them is, the promoters are looking to the "market" mainly for support. Victoria has waited long and patiently for her opportunity, and worked well. It cannot be expected that the general body of the public will see the smile that just now begins to beam on her, clouded by a speculative fever likely to retard the development of her mines, which on all sides is frankly admitted to be the only lever that will lift the colony out of its despair, and equally confessed that this uplifting agency can only come by the aid of English capital. Consequently, those short-sighted individuals who are rushing home with mines on paper that will never show any returns on capital invested will not be allowed to kill the ox which is treading out the corn. One and all are anxious, and with a determination it shall be so, that the sun of that day has set, when it will again be in the power of any man, or set of men, to again wreck that confidence which now reposes in the value of the gold mines of this colony, and this is a sufficient reason to me for helping the movement for the dissemination of correct information on the points of greatest importance.

### The Western Deep Leads, Ballarat.

The Royal Commission of 1889-91, appointed to enquire into and report on the auriferous resources of the Colony of Victoria, of which the present Minister of Mines (the Hon. H. Foster) was a member, took a mass of important and valuable evidence in investigating the characteristics of the ancient water systems, or, in other words, the origin and occurrence of the older Pliocene drifts or reef washes, embracing their component materials, extent of deposits, known localities, possible new localities, and the contour of the ancient surface as would suffice to determine the ultimate outlet of the alluvial deep ground. The epoch of diamond drills had, in a measure, by a line of sectional bores, proved a large field of undeveloped deposits over the country west and north-west of Ballarat. The scientific staff of the Mining Department rose to a national conception of their duties at this enquiry, and the reports of Messrs. R. A. F. Murray, Government Geologist; James Stirling, Chief-Assistant; Lynch (senior and junior), mining surveyors, may be read with interest, Mr. Murray stating there was an alluvial field entirely occupied by basalt on the surface extending to the west of Ballarat equal to, if not greater than, that of the Ballarat gold field proper. Mr. Stirling affirmed that the diamond drill had proved most effectual in determining the present leads, as indicating their form, value, and character. The Messrs. Lynch (father and son) joined in preparing an excellent map, bringing all the data up to date, showing the worked leads and the lines of bores then being put down at the instance of the Commission illustrating the evidence regarding the outlet of the Ballarat western lead systems. The effect of all this revived the interest in alluvial mining, and at the instance of several prominent Ballarat mine investors, notably Messrs. T. W. Parker, Alfred Clarke, and the Hon. E. Morey, the Government was induced in 1891-2-3, to put down a series of bores on the ground immediately to the west of the old Hand and Band workings on the Sir William Don and Park Leads, extending the line of bores sufficiently far enough south across the Winter's freehold ground to prove the course of the deep leads on this area. Six bores have been put down at a distance of between 500 and 600 feet apart in an almost due north and south line, about 1400 feet west of the terminal point of the Hand and Band workings with the following result:—

No. 1 bore (commencing on the north) bottomed at 355 feet on 6 feet of wash.  
No. 2 bore (commencing on the north) bottomed at 429 feet on 5 feet 1 inch of wash.  
No. 3 bore (commencing on the north) bottomed at 448 feet on 11 feet 9 inches of wash.  
No. 4 bore (commencing on the north) bottomed at 386 feet on 1 foot of wash.  
No. 5 bore (commencing on the north) bottomed at 445 feet on 6 feet 6 inches of wash.  
No. 6 bore (the most southern bore) bottomed at 454 feet with a drift on bottom.

An examination of the above data shows that No. 4 bore bottomed on high ground dividing two channels. To ascertain whether these channels junctioned within close distance of the bores, another bore was put down at a point 2000 feet west of No. 6 bore, this bottomed at 403 feet on 9 feet, headings and wash, which prove the trend of the deep ground to be north of west, and one may reasonably assume that the lead coming out of the Winter's ground would unite with the Sir William Don and Park leads with the lease block of some 1576 acres taken up by the Western Leads Proprietary Company, of which the gentlemen before referred to are the directors. Another bore (No. 8) was put down nearly abreast of No. 4 bore on the east, bottomed at 336 feet on 7½ feet of wash. This company, which has sunk a shaft (16 feet by 6 feet 3 inches) to a depth of about 55 feet, intend placing their ventures before English capitalists, and being worthy of the most earnest attention, I give a few facts in detail of those mines and their yields which have worked in years gone by the same leads at different points which have made Ballarat famous in history as one of the greatest gold-producing regions of the world. Referring to a time anterior to my own recollections of the district, I must necessarily trust to the early records of the Mines Department, and from these I gather that in 1851 an enormous amount of gold was won from the shallow alluvial ground in this neighbourhood. Coming down to the sixties we get some authentic information of the eight companies then working on the Park, or Sir William Don lead, as under:—

Name of Company.	Capital.	Value of gold won.	Dividends.
Sir William Don Company	2,000	240,500	131,000
Koh-i-Noor Company	10,000	512,000	192,000
Crickit Reserve Company	3,000	52,298	23,750
Ballarat Freehold Company	17,962	135,607	32,250
Newington Company	7,395	138,000	59,500
Western Freehold Company	8,328	110,439	57,335
Park Company	25,800	396,000	158,080
United Hand and Band Company	—	246,237	37,750

Few men can speak more authoritatively of these mines, or of the days when they made the name of Ballarat echo throughout the world, than your valued correspondent, Mr. Thomas

Cornish, who has written and re-written the history of Ballarat in graphic terms in the columns of *The Mining Journal*, and knowing that this mentor still watches over every line where the word Ballarat appears, I confess to write these notes with more than ordinary feelings of restraint and responsibility. With such records as set out above, one may well ask why these leads were not followed and worked upon down their courses. That is a question which can only be answered by the men of that day, but I know sufficient to answer that the frontage lease system in vogue on Ballarat in the sixties not only ruined many dividend mines, but sent many a poor digger to his grave, by reason of the endless litigation most of them were involved in in proving their rights to the ground they occupied. The sight of these names of mines recalls the hundreds of thousands of pounds spent in the law courts over them. By the time the Government of Victoria had awoke to the fact that the frontage system had killed alluvial mining on Ballarat, as to amend the mining laws, the diggers had dispersed themselves over the reefing fields, and, as quartz mining became better understood, it got a greater hold on the community to the almost entire neglect of working the alluvial, except by small co-operative parties on the shallow washes. With better mining laws and a disposition on the part of the Mines Department to grant large areas to companies bona fide working deep ground, the pendulum has swung back to the old order of things, not unmindful of the fact, as Mr. Stirling stated before the Royal Commission of 1891, that the diamond drill had created another epoch in the history of Victorian mining.

But it has been left to within the last two or three years to complete the revival of alluvial mining. Creswick, Kingston, Smeaton, Pittfield Plains, Rokewood, Rutherglen, Wahgunyah, and Chiltern are to-day all thriving busy centres of alluvial mining. To these may be added the large English ventures launched during the last few months—The Charlotte Plains Company, the Mount Greenock Estates Company, the New Langi Logan at Ararat, the Campaspe Deep Leads Company, and about half a dozen other promising ventures now before the English public.

Of the locally owned ventures, I have taken the yields and dividends of 12 quartz mines and a like number of alluvial mines with wash drives opened out, and I find the alluvial mines to pay nearly 50 per cent. of the gold won in dividends, while the quartz mines pay about 22½ per cent. I am going closer into this, and am daily collecting statistical matter on these points. Unfortunately, the Mines Department has discontinued publishing the crushings and yields. But the more closely the figures are examined, the more I am impressed that very shortly the people will wake up to see that alluvial mining is worth being followed even more than it is at present. I feel certain there will be a great revival in Victoria in this direction. The western leads of Ballarat, Rutherglen, and an almost unworked field around Alexandra are to come. I cannot understand the shyness of the English public in regard to this class of ventures. Repeatedly I am told by leading firms here that such and such an alluvial mine has been submitted by them to their English correspondents, and failed to be taken up. To give one illustration of the ignorance at home displayed in dealing with these mines, it is a frequent occurrence for some of the consulting engineers here to receive cables from their London employers to this effect:—"Did bore No. 6, lease give prospect?" The answer is returned as the case may be, but I think never without a hearty laugh. The man who would ask such a question, or would attach any importance to a reply of this kind, could never have seen a boring machine used. In the hard basaltic country and stiff clays it requires as much water as the pumps will send down to keep the drill clear, and it is not an uncommon thing for the boring master to send the drill 20 to 30 feet through the bottom to make sure of a core. So much water has been sent down the pumps as not only to wash any gold out of the rough wash, but with difficulty to retain the wash itself. In the No. 3 bore on the Western Leads Proprietary Company's ground, I observe the Government boring master's report shows bottom to be reached at 448 feet, yet the drill was sent through to 472 feet 2 inches, going through the pipeclay and layers of slate and sandstone. Another reason why the gold prospects are never given in the Government bores is because of a rule in the department they shall not be made public. As practical men, they attach no importance to the prospects, and their publication would be utterly misleading. The thickness of the wash dirt is sufficient. And when you have, as in the case of the bores on the ground in question, only 2 feet of drift met with, and that only in one bore—No. 3—which came in at a depth of 168 feet, it shows there are no sinking difficulties to contend with in the way of making extra provision for securing the shaft. I need only say that such mines as the Star of the East, South Star, and Band and Albion, all working quartz reefs in the neighbourhood, and draining the ground, are now working at depths close on to 2000 feet, with none of them using larger than a 12 inch lift pump. As a matter of fact, the South Star has only a 10 inch pump, and these not working to their fullest capacity, in order to dismiss all doubts as having to cope with heavy water in working the western leads, seeing that the deepest part of the gutter is over 1500 feet above ground, which is being worked by three of the largest mines on Ballarat. In proof, the New Koh-i-Noor Company are working old and new ground in the Golden Point Lead, which was the principal channel in West Ballarat, and with which the other leads junctioned. Even before this ground was worked below the alluvial by the present quartz companies, no difficulty was experienced by either the Hand and Band or Winter's Company in working the gutters; the appliances they had were then in excess of requirements, since which time a continuous drainage has been going on. Thus it may safely be stated, without fear of contradiction, that the old alluvial gutters are drained. The importance of clearly stating these facts cannot be over estimated; it expresses a conviction that the Western Leads Proprietary Company might rely on cheap and thorough development without operations being impeded by large quantities of water. In closing this article, I cannot lay too much stress on the evidence disclosed by the bores. These show that there is a certainty that the rich Winter's Lead, and the still richer Sir William Don and Park Leads, and United Hand and Band Leads, junction in the Western Leads Company's property. The records at the Mines Department, and the old mine plan of the Hand and Band Company which has been kindly placed at my disposal for the purpose of this communication, show that the latter company's workings actually ran into the eastern end of the Western Leads Company's ground, and official reports furnish ample evidence that when levels were lost in the Hand and Band, they were getting a large amount of gold from the ancient stream bed. In determining the inclination and direction of the leads above referred to, an additional check was afforded by another line of bores which was put down a mile further ahead westward. These proved that the Bunker's Hill and Sago Hill leads are both trending into the main channel into the Western Leads Company's ground. One prudent feature of working is noticeable in the fact that the company has put down their shaft at a point where they expect to bottom at 270 feet in the neigh-



hourhood of the shallow washes worked by the Hand and Band Company. By adopting this course they soon got on to the gold, and the position is better for the purpose of sinking to the level of the deep ground for working out the deeper channels, they thus escape the trouble and extra cost of sinking through a great mass of basaltic rock. Mr. Reginald Murray, the Government Geologist, in an elaborate report, strongly recommends the enterprise. I have now concluded the particulars of this latest venture for London, with a proper scheme of working capital of not less than £20,000 to £25,000; it has everything in its favour to recommend itself to English investors. I say this with confidence, for it has all the "backbone" of becoming a reasonably good property. There are no speculators in the concern; to home folks who know Ballarat men, the names of T. W. Parker, Alfred Clarke, and the Hon. E. Morey are indicative of success in mining enterprises; their past mining management might be left to answer as a public guide for the future. In another article I hope to resume the subject of the Alexandra Deep Leads, upon which a considerable area has been taken up for London by one of the leading firms here—Messrs. Harris and Field—whose record has been a good one in the class of mines they have sent home, winning a high name and reputation in public estimation.

## MINING IN THE UNITED STATES.

(FROM OUR OWN CORRESPONDENT.)

NEW YORK CITY, SEPTEMBER 1.

YOUR people have made a rich haul in Alaska. It seems that in the latter part of last year errors were discovered in the old survey of the international line between Alaska and British Columbia. The Canadian Government forthwith arranged for a re-survey when the next season should open, and this has now been completed by Professor Ogilbee, assisted by a staff of British engineers. Our Government officials, as usual, have done nothing. The result is that a territory from 3 to 8 miles in width and embracing many productive placer claims on Glacier and Miller Creeks have been transferred to Canada. It is situated in the Yukon district, and covers the water rights of 40 streams. Some idea of its richness may be formed from the fact that a miner named Miller collected 260 lbs. of gold nuggets, valued at over \$50,000, in 18 months, and another party of miners, consisting, however, of 70 men, secured over 2600 lbs. of the precious metal. Yet the saying holds good in Alaska as elsewhere, that glitter does not always spell gold. I have just received a letter from a working miner of my acquaintance in California, who writes me as follows:—"I arrived home from Alaska some few weeks ago, where I have been for the last two years engaged in mining. That country has a great name of being very rich in placers and quartz mines. There is more money spent there in prospecting and trying to find a paying property than there is produced in the country. I have seen more broke men that went into the country with thousands of dollars leaving there without a cent than I ever did in California." In spite, however, of this Jeremiah, it cannot be denied that Alaska has its prizes. The miners who worked their claims on Glacier Creek last winter, throwing out the pay dirt, and piling it on the dumps for spring and summer washing, are doing well. The Insley claim will pay over \$20,000 this season, and the mines along the creek will altogether produce over \$100,000 in dust. The 12 districts of the Yukon will yield \$2,500,000, or as much as the entire territory, including the Treadwell Mine, produced last year. There are more than 2000 miners now actively working in the Yukon country.

Butte, Montana, supplies the sensation in mining circles this week. Two Butte druggists named S. R. Fair and Edwin Clark, together with an old prospector named C. P. Pruett, located a mining claim known as Mayflower, No. 3, a short distance from Whitehall, about 25 miles from Butte, up in the mountains. They are now virtually millionaires. Rich ore was struck right at grass roots, and is yielding as high as £10,000 per carload. A local reporter says:—"A visit to the mine is on first appearance disappointing. All that is to be seen is a hole about 28 feet in length, 15 feet in depth, and 12 feet wide, in which three men are shovelling out ore which is immediately sacked. The men are working in a lead. The predominating rock is limestone and would be called by many slates. It is a contact between lime and dolomite, and carries about 90 per cent. silica and 5 per cent. iron. The lead dips to the south-west, and the ore wall in sight is dolomite. The trend of the lead is north-west by south-east. On either side and at the bottom of this seeming pocket are clay seams, which are lined with a small streak of talc which is very rich in gold. A peculiar feature of the quartz is that a specimen weighing more than \$600 does not show a particle of free gold. The ore is peculiar, and cannot be treated except by smelting. Sixteen tests have been made to concentrate it and treat it by cyanide. The richest ore comes from the surface or a few feet down, while at the bottom of the cut the assays show about 4 inches in gold. Seven carloads have thus far been shipped, and they have given a nett value, after paying freight and melting charges, of \$52,000. So far it does not seem likely that this rich ore will go down to any very great depth, but the length has not yet been ascertained. Hundreds of miners and prospectors are swarming to the scene, and it will not be long before the entire country in that section is staked out."

Here, then, is another rich mining district suddenly added to the list of those now being worked in this country. But the incident is not novel or surprising. Such "sensations" are of frequent occurrence. The moral they proclaim in trumpet tones is "Go ye, and do likewise!" It is hard to understand why English investors do not take to American gold mining in the same vigorous fashion that has characterised their investments in the gold fields of South Africa. Part of the reluctance is doubtless owing to American mining investments having hitherto been mostly made in a wrong manner and at a wrong stage, as already explained in a former letter of this correspondence. But a good deal more is, I suspect, due to the impression that we are seeking to entice English capital into a field that we do not consider good enough or safe enough for our own money. If this idea do, in fact, prevail, it is an erroneous one. I am compiling a list of investments in American mines since January 1 of this year, and hope to include it in my next letter. It will show that American money is steadily flowing into American mines, and that, if American mines are offered in England, it is because their number is in excess of the educated capital here available.

"Educated capital" is a term that, perhaps, needs explanation. When money is invested in some industrial undertaking with the intention to make profits by the regular development of the enterprise, and with due regard to the inherent features of the case both favourable and unfavourable, the combination of knowledge and judgment on the part of the capitalist may be regarded as an evidence of so much education. When, however, the investment takes the shape of a mere purchase of

shares or bonds in a joint-stock company, the transaction frequently becomes a case of ignorance rushing in where education fears to tread. A very large proportion of the persons who loudly complain of having lost money by "mines" are rank speculators, who simply bought certain pieces of paper in the hope of being able to soon resell them at a higher price. They made no enquiry into the supposed industrial basis that was the foundation for the issue of the paper. They cared not one jot whether the paper represented a productive mine, or a mere "hole in the ground," or a wild cat of the purest breed. It mattered nothing if the supposed mine had no existence in fact. The character of the management was, in their eyes, an unimportant trifle, and they made no effort to understand even the rudiments of the case. All they were concerned with was the course of the stock market and the actions of the manipulators. The money invested under such circumstances was not employed in mining, and was not lost in mines; yet in too many cases the poor mining industry has to shoulder all the discredit. Large sums have been and still are being transferred in this manner from the pockets of small speculators into those of promoters and brokers, who supply the counters to gamble with, and who conduct the gaming table. But the money thus handled is "ignorant capital," and is never available for real mining; so that when we attempt to consider what funds can be depended upon for the actual development of mineral territory, we must not include in our estimates the many millions of floating share-money, but must confine ourselves to the comparatively small figures of "educated capital." From this point of view it will be found that the mining industry, as a whole, has accomplished its great progress, and achieved its marvellous feats on the strength of monetary support far less than that accorded to any other branch of human labour. Very few indeed of the great American capitalists have as yet come forward to develop the mineral resources of the country. Their education in this direction is only beginning, and this is why there exists at present so large a field open for employment of foreign capital. How long the opportunity will continue cannot be foretold. Industrial movements in the United States are apt to be sudden and wide reaching. It needs but an impulse in the right direction and applied in the right manner to change the whole face of affairs. The present political campaign may do this, and before the end of this year we may possibly witness the inauguration of a vast movement that shall make America the controlling factor of the world's metallic production. Major McKinley, the head of the Republican party, has now under consideration a proposal for facing the silver agitation with a gold policy of a national character as distinguished from the mere Wall-street tactics hitherto depended upon. It is held that if the unappropriated Federal lands be systematically surveyed and explored a large number of new auriferous districts will be opened up. The suggestion is that these shall be developed by the United States Geological Survey to an extent sufficient to show the nature and magnitude of the ore deposits, and then that mines shall be marked off and sold or let on lease to people desirous of working them, instead of being presented as a free gift to locators, which is the existing mode of disposing of the national domain. It is argued that a gold deposit vouched for by Federal experts will readily secure the aid of capital for its development, and that in many cases a system of appropriations and loans from Government funds may advantageously be resorted to for the speedy operation of the new gold fields, the required money being raised by the issue of Federal bonds to be paid as to interest and principal from the purchase monies and royalties received for the mines. If this policy be adopted by the Republican party, the result will be rapid and vast. The gold production of the United States will rise to a figure in excess of that of the rest of the world. We have many gold mines already at work that now produce over \$1,000,000 each per annum. If (say) 150 additional mines of like extent were brought into operation, our gold production would at once leap up to over \$200,000,000 yearly, and as this figure represents the total production of the entire world at present, it will be seen what a tremendous revolution in the monetary sphere is impending.

I have dwelt somewhat upon this subject because of its importance to the mining community. If gold production become recognised in the United States as a national industry, to be promoted and protected by the Federal Government for the benefit of the people at large, capital will forthwith be "educated," and there will be a rush to locate mining claims in every mineral region of the country before the existing law can be changed. Our great financial houses will no longer dilly-dally and wonder whether it comports with their dignity and interest to become connected with mining. There will be a general scramble for the huge fortunes that at length will be plainly seen to be lying scattered over almost the entire area of our Western States. But if, in the meantime, you Englishmen shall have adopted the policy of buying up good discoveries on bed-rock terms instead of waiting to purchase producing mines at inflated prices, it may be that our own great houses will find their education to have been too long deferred.

## OUR SOUTH AFRICAN LETTER.

(FROM OUR OWN CORRESPONDENT.)

JOHANNESBURG, AUGUST 10.

OF the many important questions now being discussed, one has been finally, and, what is better, favourably settled. The Liquor law, sanctioning total prohibition of liquor to natives, laid by the Second Raad, was carried on Friday last by the First Raad also, and, therefore, will be enforced from January 1 next.

No influence has been left unmoved, no trouble has been spared on both sides to secure the rejection or the approval of the law, but the interests of a small part of the community have been discarded in favour of a reform which was badly needed, as the evil was increasing daily.

People who have not got the blessing of a Kaffir canteen close by cannot imagine how many disgraceful scenes occur weekly all round these dens, and we must really be thankful to see the Government enabled to put a stop to such a bad state of things.

Somebody is showing a certain amount of sympathy for the several hundred licensed holders. I think they have got time enough to dispose of their present stock, and to give a different course to their commercial activity.

I join the *Star* most heartily in its praising words addressed to the First Raad, and I fully agree with it in thinking that by removing the cause many evils will disappear, and the mining industry will benefit by it.

The law will only be gradually enforced, because it is feared that the natives, if the restriction, or, better, the prohibition, be applied all at once, may leave the country altogether.

Another question which has entered now on a practical stage has been the long-suggested scheme of reducing the wages to natives.

The joint committee of the Chamber of Mines, the Association of Mines, and the Association of Mine Managers held their

first meeting on July 29, and have since continued sitting daily to draft the necessary resolutions, and to agree to a provisional reduced scale of wages, which has already been submitted, and, if approved, will come into force in a short time, if a joint action of the mine managers supports the movement.

I do not know how the natives will take this reform, but if properly applied, and if introduced by degrees, we may trust that it will be quietly accepted all round.

The final question of big interest to us all, the long promised and impatiently attended Johannesburg Municipal Bill, in being submitted to the First Raad, met with a strong opposition, because the Pretoria Legislators are convinced that the Johannesburg Council may prove a rival to them.

At any rate it was decided to send the Bill to the Second Raad to deal with it, and it may be expected that with some alteration it will go through.

Of the several meetings of companies held during the week, that of the African Estate Company on the 7th inst. has attracted a good deal of attention, especially as the previous meeting on July 31 was one of the liveliest we had here since a long time, and had to be adjourned.

It would be unfair to make any remarks before the inquiry, which has been demanded and voted, has taken place, but what the debate has disclosed is certainly not bringing much confidence to the intended investors, and we hope that in a fortnight's time, at the adjourned meeting, the investigation will favourably report on the value of the assets. However, it may be said on the contrary, the energy shown by the opposition and the exactitude of their information deserve much more sympathy than the usual servile obedience at company meetings.

What I said about the Driefontein and the Anglo of the East Rand Proprietary Mines was disclosed at the first annual meetings of both companies.

The financial position of the Driefontein shows that the cash in hand and the reserve shares still to be issued leave a working capital of more than £107,000.

It is confirmed beyond all doubt that the existence of a good paying reef runs through the property, and on the south reef shows a regular and well-defined formation between 16 to 18 dwts.

Compressors are being put down, and the developing operations will also be pushed eagerly forward on the north reef.

Owing to the bright prospects of this mine, instead of 40 stamps, as it was at first decided to erect, a powerful installation of 120 stamps will be completed and fit for operations towards the middle of next year.

On the Anglo the south reef has also been developed, and the average assay value taken over a width of 3 feet is of 35 dwts.

The July output has been declared. It is a record one; or better, it is the record of the Rand monthly production—203,873 ounces.

These figures speak for themselves, but notwithstanding such a mathematical proof of the resources of the Rand, it is really disappointing to see how little enthusiasm has greeted this declaration, and what little influence it has exercised on the market. I remember last year how the August declaration was greeted—champagne was running freely, and there was no end of rejoicings. Now things go on as dull as ever, and nobody seems to appreciate the value of such a high return.

Of the several meetings of companies, not much is to be said. On the Bleinfontein Gold Mining Company and Benoni Gold Mining Company there has been only a good deal of developing work going on, and there, more than anywhere else on the Rand, it will be worth knowing the structure of the ground, how the reef runs, the yield of same, and all those details which may concur to increase our knowledge of this part of the East Rand, which has been the object of many a discussion, and to the expression of several theories, which have all to be proved, and which the several companies now developing will have to prove if it pays them or not.

We have just to hand the interim report of the directors of the Robinson Gold Mining Company for the first six months of 1896:—

The ore developed on main reef, leader, and south reef amounts to 419,251 tons.

During the half-year a total of 85,699 tons main reef, main reef leader, and south reef were mined and milled.

The output from the ore gave a yield of 78,507 ounces, yielding 18 dwts. 7.72 grains per ton.

The gross value—£291,758—and the value of yield per ton was £3 6s. 9d.

To this must be added the returns of the slimes plant, which have not been included, and which, out of 38,021 tons treated, have produced 815,492 ounces of gold, valued at £30,329 4s. 11d.

The company's income for slimes delivered, and its share of the profits on working, has been £2037 1s. 6d.

The total expenditure, including working expenditure, expenditure on mine development, on machinery, plant, and buildings, on retrenchment account, &c., amounts to £172,124, leaving a cash profit for the half-year of £168,468.

It may be expected that the returns for the second part of the year will be still more satisfactory, owing to the reduction plant being fit to treat in the same proportion both slimes and sands. By the end of September this alteration will be completed, and the Rand Central ore will treat 8000 tons per month.

RECKLESSNESS IN A MINE.—An inquest was held on Monday, at West Bromwich, on John Dickinson, miner, who died on Friday from injuries sustained through an explosion at the Sandwell Pit Colliery, on the 28th ult. Mr. W. B. Scott, Government Inspector of Mines, was present.—Thomas Richards, leader at the colliery, said he was working in stall No. 18 in company with Dickinson and two other men, when Dickinson went to fetch some powder to blast a hole. He came back with the powder, and was carrying a lighted candle, with which he accidentally fired the powder. Witness said the candle fell on the powder and fired it. Witness thought a sulphur lamp should have been used for the purpose.—The coroner said there was no doubt that deceased met his death entirely through his own recklessness.—The jury returned a verdict of accidental death.

GOLD SOLVENTS.—Dr. C. A. Mulholland, who has been lecturing before the Scientific Society of Bathurst (N.S.W.) on "Practical Gold Solvents," mentioned two modifications of the cyanide process, both invented by himself. The first is called by him the bromo-cyanide process, and in it he employs the vapour of bromine in addition to the use of potassium cyanide. An experiment was performed to illustrate the rapidity with which gold is dissolved in a solution of cyanide of potassium when bromine is added, and the result was very striking. The gold is finally recovered in the same way as the cyanide process. The other improvement is the addition of hydrogen peroxide to the solution. The object of this is to effect the more rapid oxidation of the cyanide, and consequently to shorten the time occupied in dissolving the gold from the ore. In the experiment performed a 4 per cent. solution of cyanide, containing some fine gold, was acted upon with 4 drachms of hydrogen peroxide, strength 10 vol., and the gold was rapidly dissolved. The gold is finally recovered in the ordinary cyanide process.—*Australian Mining Standard*.



**BREMNAES GOLD COMPANY, LIMITED.**

HANNAN'S CRESCUS GOLD MINING COMPANY,  
LIMITED.

A vote of thanks was accorded to the CHAIRMAN, who, in acknowledging the compliment, expressed the hope that at the next meeting the directors would be able to give the shareholders some very satisfactory information. Everything, he said, pointed to this and personally he had no doubt that this mine would be one of the great successes of the West Australian gold fields.

of the law are such that we could not postpone it any longer. I believe the first thing to say at such a meeting as this is to remind you that this is a statutory meeting, and that there are no accounts to be presented or report to be received by the shareholders, and I will transact that formal duty. You are aware that the date of allotment was May 23 last, and on that day the directors proceeded to allot the whole amount of the capital to 484 shareholders, so that we may be said to have a full list of shareholders. The transfer of the property is in process of being completed. It is not yet completed owing to various causes of delay, but we expect to have it completed very shortly. As regards the other business matters, I may say that a settlement on the Stock Exchange for the shares has been granted us, and will take place on the 15th of this month. With regard to the property generally, it will be in your recollection that the prospectus put it forward to you and the public at large as a development company—a company that had large properties, amounting in all to 430 acres, in a very well known mining district, and a property that contained great elements of hope, but on which comparatively little development had been done, and where, therefore, certain facts were in less proportion than the speculative element of hope. I am glad to be able to tell you that from the date of allotment to the present time the balance has been rapidly growing in the other direction, so that at the present moment I think we can truthfully say that the ascertained facts are very much larger than they were, and the speculative element is smaller in proportion, because properties like ours, on which little work had been done, have now been developed to a considerable extent, and, almost uniformly, most excellent results have been shown. It was only the day after the allotment took place, on May 23, that we received a cablegram about the Zealandia portion of our property from the manager. He reported that the Zealandia shaft—at that time there was only one shaft—"has reached a depth of 56 feet, crosscut 30 feet; have struck the lode, 5 feet wide; we are not yet through visible gold." That was very encouraging for a new corporation. Since that time we have received cablegrams about not only the Zealandia, but the other properties which have appeared from time to time in the financial newspaper, but which I will refresh your memory upon. On June 18 we received a cablegram referring to the Zealandia property to this effect:—"George Gray reports Zealandia properties developing splendidly; he is much pleased with; recommends vigorous development; suggests you remit immediately £5000, enable him push ahead with." We entirely coincided with his suggestion of vigorously development, and we did not hesitate at once to cable him the necessary funds for making that vigorous development; for, although we have a very satisfactory working capital of £75,000, as no doubt the shareholders are aware; still, even with £75,000 you cannot afford to let the grass grow under your feet. You must work hard, and develop your property as well as possible, so as to be able to take advantage of any favourable opportunity of the market for disposing of them. On June 23 we received our first substantially long letter on the subject since our allotment, which gave us an account of how the properties on the other side—what we usually call the 162 acre group—were situated. On that group at that time they had been working shafts in all portions of the property. It was, however, a distinct part of the board's policy to concentrate their efforts as far as possible where the most favourable indications existed, so as, as early and as cheaply as possible, to be in the position of being able to offer properties to the market. It was discovered that the best of the developments were showing in Lease 1178, which is called the Russell. From time to time we have received information about this lode or series of lodes, and there is no doubt, I think, now that there is a very well developed and a very large and valuable property, consisting of the middle portion of this block—the Rockhampton, the Russell and the Blackall. With reference to this block, Blackall 1190, I and on June 23 that "Six men are still employed here in driving the crosscut east, which is now in a distance of 76 feet, 35 feet of which has been through lode formation, being similar in character to that in the crosscut west of No. 2 shaft, and will pan off about the same." In that connection it becomes useful to know what was met with in the crosscut west of No. 2 shaft, No. 2 shaft being on the Russell property. You will see from the plan on the wall that they have been driving a crosscut west from No. 2 shaft, "and are now in 13 feet 6 inches, 12 feet of which is in a lode formation, equal in appearance to anything that can be seen on the field." Then our manager goes on to say he does not hesitate "to forecast a future of prosperity for this property, not exceeded by any others which I am at present acquainted with on the field." We get from that letter of June 23 a good deal of comforting and satisfactory information. The next letter I turn to was received on July 10, and, with reference to the Russell property, we gather from it that an additional 18 feet 6 inches have been driven, "now making a total of 29 feet 6 inches from crosscut. The lode formation continues unaltered since my last advices, and bears every appearance of promise." Then we go on to learn with reference to the No. 2, or west shaft, about which I spoke a moment ago, that it has been driven a further distance of 24 feet 6 inches since last report, "making a total of 38 feet from the shaft, showing a lode formation of no less than 36 feet 6 inches in width, without yet meeting with the hanging-wall." That, you see, is a very large and substantial lode deposit, and when you hear, as I shall tell you presently, that practically in the whole of that deposit there is a good showing of gold, I think you will agree with me that the properties we are developing are opening up most admirably and most splendidly. When the company commenced operations there were a development shaft or two on the Russell property, but comparatively little else work was done, except surface work. At the present moment there are eight shafts in that particular part of the property 180 feet deep, and in the majority of those shafts excellent discoveries have been made. On July 21, we received information showing that the properties were developing well, and not falling off in any particular, and finally stating that the manager was immensely pleased with what the developments showed. On August 14 we received a cablegram from our agent, Mr. Saunders, with reference to the Blackall, 1190. He says:—"Lode formation 99 feet wide; stone better than hitherto landed; makings of fine property from day to day demonstrated." If you remember the terms of the prospectus, you will recollect that one of the inducements which the directors held out to shareholders to come in was that Mr. George Gray was going to be the mining manager of the company. It was his report which, no doubt, obtained the greatest amount of confidence in the City of London. The directors thought that the fact that Mr. George Gray was going to act as mine manager ought to give confidence to the general public—that the man believed his own report—and, in point of fact, immediately after the directors commenced operations they appointed Mr. George Gray as mining manager. We now have the latest information on the subject of the mines from Mr. George Gray himself, who has visited the property, and made his report. I will read the cablegram in full, which is dated September 3:—"Kalgoorlie. Large amount exploration work has been already carried out on the company's property.—Zealandia, situated north of Corsair country. Five lines lode have been proved, the most promising lode as yet being intersected on the Waihi; again met with on the Porirua shafts sunk 100 feet, where obtain good prospects with increasing depth; auriferous quality of the lode improving. Taaapeka splendid lode 27 feet wide cut at a depth of 57 feet; same lode discovered in this. Wanaika,



as continues sinking, formation becomes more solid; proportion fine gold is increasing. Waharo, large formation carrying fine gold now being sunk upon blocks in this group now being developed well; we are following lode, hoping open richer shoot than yet exposed in this company's group. Western side Hannan's ore belt work has been also exploratory description. Russell, three parallel lodes have been discovered, and have been traced through other blocks both north and south; eastern shaft sunk, 104 feet driven, expect to cut vein within the next few feet along lode, which is gold bearing; western shaft 13 feet below water level, as sinking proceeds supply increases, lode carries gold. That is not only satisfactory as regards the gold, but I am sure all of you who have experienced West Australian mining will know that is very satisfactory as regards water. "Rockhampton north shaft crosscut at a depth of 105 feet; this has proved lode great width, composed of very kindly looking material; pinnings give good results; Little Boulder lode has been traced running through property; samples from Little Boulder lease same lode assay 3 ounces per ton. Another extended lode formation has been opened. Black's showing colours in this dish. I advise you strongly place upon property steam hoisting machinery and pump, concentration labour both groups granted." I think the shareholders will agree with me that this is a very satisfactory cablegram. (Applause.) We now have the railway completed up to the property, or, rather, up to Hannan's field. We are getting water, and the water is increasing as we go down. Instead of having nothing to offer to the public, we have got, as far as I can see, at least six or seven properties which are opening out sufficiently well to be capable of being honestly offered at a good price and a good profit to this company, whenever the market shows signs of receiving them. I am told by people who pretend to know more about Stock Exchange and City matters than I do, that in all probability there will be a more lively market for mining shares within a very short time. Whenever it comes we are ready for it. If it comes soon we have got our properties well developed, and the development is increasing and improving every day. If it comes late we have a substantial working capital; we can afford to go on working and proving, conscious that the more money we spend on our property the more we shall be entitled to ask for it and to get for it when we come to sell it. That I believe to be a perfectly true and unbiased statement of your affairs. I am very glad to be able to speak so well of the properties. I hope that at other meetings which I shall have to address I will have a no less satisfactory report to present to the shareholders than I have had the pleasure of presenting to-day. Up to now everything has gone as well as we could possibly expect; your directors are fully aware of the exigencies of the occasion, and I can assure you that they will lose no opportunity of doing the very best they can for your property. (Applause.)

Mr. HERBERT MOIR said that when he was in Western Australia he went over the property of the company, and he wished it belonged to Hannan's Proprietary Company instead of to the Hannan's Kalgoolie Proprietary (Limited). (Laughter.) They had a very fine ironstone formation going down, and it had every appearance of becoming a very valuable property indeed. The cablegrams which had been read by the Chairman had special interest for him, because whenever they had a success, the property in which he was interested was almost sure to have it, for they claimed to have the same lodes on their property. He congratulated the shareholders upon having what he believed to be a very valuable group of mines indeed. (Applause.)

Colonel PARRY NISBET proposed a vote of thanks to the Chairman and directors, and remarked that what the shareholders had heard was full of encouragement for the future.

Mr. HAMILTON seconded the motion, which was carried unanimously.

The CHAIRMAN, in acknowledging the compliment, said the directors were glad to hear from Mr. Moir so excellent an account of the property. What they had heard from Mr. Moir was the evidence of an eye witness to the value of the Zealandia group of their property. He (the Chairman) believed the other group was not inferior in value to the Zealandia, and he looked forward in the most hopeful spirit to the future of the company. (Applause.)

The proceedings then terminated.

### BULLION CORPORATION, LIMITED.

The statutory general meeting of the Bullion Corporation (Limited) was held on Wednesday, at Winchester House, Old Broad-street, E.C., under the presidency of the Right Hon. the EARL OF KINTORE, G.C.M.G., Chairman of the company.

The CHAIRMAN said: Gentlemen—This is, as you are aware, the first general meeting of the Bullion Corporation (Limited). The capital allotted was £100,000, and arrangements are completed for securing the subscription of the remaining £50,000. We were incorporated on the 6th day of May this year. Your directors have consequently under four months' work to review, and a very terse and simple statement on my part will cover the ground. I am proud to be able to say that the board can look back on that short period of four months with a considerable amount of satisfaction. At the present time the position of the corporation is such that the board would be warranted in declaring a substantial dividend, though they consider the best interests of the shareholders will be served by not being too precipitate in such action; they have, therefore, decided to postpone temporarily any division of profit. This position, you can easily believe, causes much gratification to your directors, considering that, as I have said, barely four months have passed since the incorporation of the company, and that those four months have been months of comparative dulness in West Australian affairs. It is expected that in the early future we may have considerably more activity, and that the present sound and conservative position of the Bullion Corporation will enable your directors, when more active times come, to take full advantage of all financial opportunities that may arise. We shall be able to do this, because your board has always made a cardinal point of keeping the capital of the company in as liquid a condition as possible, believing that it is better to earn firm amounts in actual cash than large paper profits. (Hear, hear.) I may also say that your board has, in the past, and will in the future, continue to be extremely careful not to pledge the corporation to large promotion schemes, only indulging in such projects when placed before them under extremely favourable circumstances, for, gentlemen, we hold that the first object of the corporation is to deal with financial matters, as all really concerned with the exigencies of a new mining centre must be fully aware that this is a more sound and more profitable business than actual promotion. Already your board has obtained for the corporation a position in several very important financial undertakings in conjunction with some of the most powerful and friendly West Australian financial associations with which it has connected itself in business matters. The profits arising from these transactions your board has not in any way discounted in the framing of the statements, which I now make to this meeting. I may just add, as an instance of the interest taken by various members of your board in the welfare of your corporation, that at the present moment one of your directors is in Western Australia devoting himself solely to the interests of the corporation in conjunction with one of the mining engineers employed by your board. This leads me to mention that your board has been fortunate in obtaining for the corporation at home, as consulting engineer, the services of the well-known mining engineer, Mr. Arthur L. Pearce; while in Western Australia you have in your employ a very careful and capable engineer in Mr. C. B. Kingston, on whose judgments and integrity your board implicitly relies. This short statement, gentlemen, conveys all the information which, I think, I can usefully give, and I sit down congratulating the shareholders on the present sound position and excellent prospects of their corporation. (Applause.)

A vote of thanks to the Chairman terminated the proceedings.

The NUNTERBROOK COMPANY (LIMITED) have sold the gold obtained during the month of July, which realised £14,095 16s. 6d.

### WEBSTER'S FIND, LIMITED.

The first general (statutory) meeting of the shareholders of Webster's Find (Limited) was held on Tuesday, at the Great Eastern Railway Hotel, Bishopsgate-street, E.C., under the presidency of Mr. T. H. WATSON.

The SECRETARY (Mr. R. Larchin) read the notice convening the meeting.

The CHAIRMAN said: Gentlemen—I think that a great many chairmen of companies in London would be very glad indeed to occupy a position such as I occupy this afternoon, as you will find from the statements that I shall have the pleasure of laying before you. At our statutory meetings, as a rule, there is very little that people can take hold of and carry away with them; but to-day, pursuing the course I have already done, and that my colleagues back me in doing—viz., giving you all the information that we have ourselves—I think you will have something that you can carry away upon which you can reflect, and which, I think, will probably please you as you reflect upon it. This company was registered in May last. The property is situated about 150 miles from Coolgardie—not an unreasonable distance, in a country like that, for our general manager, Mr. Sherlaw, to travel to supervise the mine, along with the other mines he has in hand. The Niagara district—which is the district where our property is situated—is coming very much to the front, and I think I may say, without fear of anyone demurring, that in the Niagara district there have been discoveries made of reefs quite as rich as any that have yet been found in Australia. I think that perhaps among those in the Niagara district we may venture to assert that there are none richer than our own; there may be others as rich, but I do not think that there are any that are richer. This property was discovered, proved, and secured by Mr. Webster, a gentleman well known to Mr. Sherlaw; and having proved it, and having thought it worth his while to secure it, he went down to Coolgardie and submitted the property to Mr. Sherlaw, who was very much pleased with all Mr. Webster had to say with regard to it. Having heard what he had to say, the next thing was not only for Mr. Sherlaw to get the offer of it, but to make sure that it would not be offered to anybody else until he returned from inspecting it. He then had the offer of it on behalf of the Coolgardie Syndicate, and he having inspected it, I think I may venture to say, from what Mr. Sherlaw both cabled us and wrote us afterwards, that he found the property quite as favourable as anything that had been said about it; indeed, the most favourable account that Mr. Webster gave of it himself was fully proved by Mr. Sherlaw's visit, and he was so thoroughly satisfied with what he had seen that he went back to Coolgardie, met Mr. Webster again, and on behalf of the syndicate, purchased the property from Mr. Webster. Mr. Sherlaw wrote in as high terms, and evidently in as good spirits as ever he has written to us since he went out to Western Australia. In the property itself there are two leases, containing together 32 acres. Most of you will remember that you had a rough sketch of this property sent you. It was only a rough sketch, but I think it gave you a very good idea of what it was like. To-day, however, we have at the office a correct plan of the property, which, though it may vary a little, does not alter what you might have gathered from the rough sketch that was sent to you. After some further development under Mr. Sherlaw's direction, this property was sold to this company—the Webster's Find—and I think I may say that one gentleman in our office made a very happy hit when he called it the Webster's Find. Well, we have given that name to the company, and I believe that Webster's Find will turn out to your satisfaction as thoroughly as anything in which you have ever invested your money. (Applause.) The capital of the company is £75,000, in shares of 10s. each. The company was brought out by the Coolgardie Syndicate, who bore all the expenses up to the time of allotment; and I am very happy to say that, although we never issued a prospectus, never put an advertisement in a paper, and never sent to anyone outside our own little group—that is, the group with which my colleagues and I are associated in the office in Broad-street Avenue—we had applications from shareholders in our several companies for 52,369 shares. (Applause.) I think that as an onset from those with whom we had been working previously, and who evidently had at any rate some measure of confidence in us, speaks well for the estimation in which they held the directors of the company. I may now say that since the acquisition of this property the developments have proved not only equal to the best representations that were made to us—some of these you will find in the prospectus, the sheet annexed to the prospectus of the company giving reports both from Mr. Sherlaw and others—but since we took possession of the property they have fully proved the correctness of these statements, and have even gone beyond them. The property has turned out richer and better than we anticipated, or, at least, than we were given at first to understand. I may here remark that Mr. Sherlaw is not a man to exaggerate any point, however good it may be. If it be very good it does not need exaggeration. If it be medium there are men who would give a little extra colouring to it to make it look better than it actually was. Mr. Sherlaw is not that man. I believe that rather than overstate anything pertaining to a property which he was putting before his own syndicate he would rather understate it, so that we might be on the safe side in any purchase we made. In connection with this property, the machinery required has already been ordered. I expect it is now on its way, and we are hoping shortly to hear of its arrival on the mine. The money to pay for it has been sent to Mr. Sherlaw, so that we are in no debt as regards the machinery. The transport, Mr. Sherlaw tells us, is comparatively easy, although the railway has not reached there yet. I may say he is expecting the railway to pass very near the property, and when that takes place transit to and fro, whether it be of anything we require on the mine, or anything we have to send from the mine homeward, will be very easy and cheap. To-day, of course, the cost of transit is somewhat heavy, but the roads are pretty good, and the transport is comparatively easy when you look at some mines where they have to pass over hills, and where there are no roads. We have good roads in this district, and the transport is easy, if not cheap. We are told by Mr. Sherlaw that there is a large lake of fresh water about three miles or a little more from this mine, and water could have been obtained from that land had we so required to take it. But we are not needing to take it from there. To conduct the water by pipes and dykes and so forth for three or three and a-half miles would have been comparatively expensive; but in an adjoining mine they struck an ample supply of water at a depth in the shaft of 85 feet. Mr. Sherlaw heard of this, and it was not very long before he was again in the Niagara district, looking after this particular property. Having ascertained for himself that there was there a supply of water sufficient for all our requirements, he made arrangements for securing this additional property. (Applause.) I think it speaks well for his foresight and forethought that he should at once have attempted to secure this property. (Hear, hear.) We have it now as our own: it is in our possession, and I think it speaks well also for Mr. Sherlaw that he made arrangements for its purchase. He bought the property, but I may say that our taking it over does not necessitate any addition to the capital of this present company, as he arranged for the whole payment to be in shares of the company. (Hear, hear.) That is an indication of the confidence the owners of that additional property had in Mr. Sherlaw, and in ourselves as a company. We pay for the whole of it in shares of this company, and I think I may venture also to suggest—I am not sure that I am quite correct, but I think I am not far astray when I say this—that the price of this property is probably not more than it would have cost us to bring the water from the lake to which I have already referred. You will thus see we have water on the spot, and we have an addition to our property of 10 or 11 acres, making altogether 42 or 43 acres that we have in connection with this Webster's Find. I think there are very few companies in Western Australia that can say they are in a better position than we are ourselves. When I say that we have ordered machinery which is on its way, and that the machinery has been paid for before it was sent off, I think you will

admit that we are not in a very bad position, especially when I tell you that, in addition to all that, we have to-day in the bank, without having made any further call, a balance to our credit of between £9000 and £10,000. (Applause.) I will read you the latest cablegram we have received. It is dated the 5th of the present month, and reads:—"The development fully justifies the expectations we have formed. There is a total of 700 tons of quartz mined from all places, and developed ready for stopping 600 tons. Preparations to erect the stamps are now being made. Anticipate no difficulty water. Barton, surveyor, made careful examination, and promises first gold bars by Christmas. (Applause.) Now, we were registered in May, and we expect to have our first gold bars within seven months of the date of registration. There are very few companies, either in Australia, or anywhere else that can say the same thing. We have been pushing on this work—or Mr. Sherlaw has, under our instructions—as fast as we could well do, and it is our intention not to deviate one iota from the stand that we have already taken. We intend as much vigour to be thrown into the prosecution of the work in the future as we have been throwing into it up to the present. (Applause.) If in what I have said there is anything I have not made clear, I shall be glad to answer any question any shareholder may be pleased to ask."

A SHAREHOLDER said he supposed that though the Chairman had mentioned that some 52,000 shares had been taken up by those interested in the directors' group, there had been a great many other shares issued.

The CHAIRMAN: Of course, the original sale to this company by the parent syndicate absorbs a considerable number of additional shares beyond what I mentioned, but the 52,000 have been actually subscribed for by the shareholders of our different companies.

The SHAREHOLDER: There is a large difference between 52,000 and 150,000. The total capital is 150,000 shares, so that there must be more than 90,000 somewhere else.

The CHAIRMAN: We reserved 50,000, or £25,000, for working capital, and that has been subscribed, and the parent syndicate is prepared to take all its purchase money in shares. We have thus our working capital and £1160 in addition.

Mr. RUGG moved that a hearty vote of thanks be given to Mr. Watson for so ably presiding over the meeting.

Mr. LITTLE seconded the motion, and suggested that if the Chairman would be good enough to give the shareholders a dividend next Christmas they would be very pleased. If such payment were made, it would be one of the shortest periods in which that had been done in connection with mining companies in West Australia.

The resolution was carried unanimously, and

The CHAIRMAN said: I am very much obliged to you for your kind expressions. The second of the resolution suggested the payment of a dividend about Christmas. Well, I am afraid that can hardly be accomplished, but if the gold returns to Christmas are sufficient to warrant it, immediately after we receive them you shall have a dividend. (Applause.)

The proceedings then terminated.

### LEVANT.

A 16 week's meeting of Levant shareholders was held on the mine on Tuesday, Major WHITE, the purser and manager, presiding.

The accounts showed labour costs amounting to £7923 4s. 4d.; merchants' bills, £2586 15s. 5d.; coal, &c., ex-ship board, £986 14s. 10d.; rent, rates, and taxes, £87 19s. 7d.; interest and commission, £91 8s. 11d.; total, £11,678 3s. 1d. On the other side 125 tons 7 cwt. 3 qrs. 21 lbs. of tin had sold (after deducting dues) for £4864 6s. 11d., 1430 tons 3 qrs. of copper for £5503 0s. 7d., and 55 tons 1 cwt. 2 qrs. of arsenic for £408 8s. 1d.; by carriage of tin, £10 1s. 4d.; copper ore, £475 15s. 11d.; arsenic, £97 15s. 11d.; discount on merchants' bills, £31 19s. 10d.; total, £11,391 8s. 11d., showing a loss on the 16 weeks of £284 14s. 2d., and a present balance against the adventurers of £1052 19s. 6d.

The agents' report stated:—

We are making preparations to sink the air winch shaft below the 200 fathoms level. The lode in bottom is worth £10 per fathom for copper and tin. The shaft is now ready for timbering from the 200 to the 275 fathoms, and we shall be sending the engine down to fix in a short time. The 300 fathom level west on the south lode is worth £9 per fathom, driving at £4 5s. The steps in bottom of this level are worth on an average £6 per fathom, stopping at £4 15s. We have five slopes in back worth £15 per fathom for tin and copper, stopping at £4, and two slopes worth £7, working at £2 10s. We are driving north on slide at this level on speculation, at £1 10s. per fathom. We are also driving east on north vein at this level, and worth £7 10s. per fathom, driving at £6 15s. The winze in bottom of this level is worth £7 10s., sinking at £3. The slope in back is worth £7 10s., stopping at £2 10s. We are also driving west on north vein at this level. This end is worth £2 per fathom, driving at £3 10s. We have commenced to sink the main engine shaft below the 250 to £13 per fathom by four men and two boys. The 210 level west of crosscourse on south lode is worth £1 per fathom, driving at £7 10s.; the slope in back is worth £4 per fathom, stopping at £2. We are opening and making good the 130 level west on south lode. We have driven in ends 125 fathoms 5 feet 10 inches for the last 16 weeks, and are now driving 17 ends by 53 men and 10 boys, and we have 14 men and 30 boys working in stops, winzes, and rises. We have 36 men and nine boys working in 21 pitches, varying from 5s. to 10s. in the 4s. Total employed in every department underground 321 men and 69 boys. Our copper lode in the bottom of the mine is getting slightly mislead with tin, so we may not raise quite as much copper during the coming 16 weeks, but we hope the tin will increase that we may show similar results in the past.

Mr. F. OATS, speaking as a large shareholder, referred to the repeated losses which necessitated paying interest to the bank. He thought it was time that a call was made.

The CHAIRMAN said they had not made a call for 10 years, but he did not think they would find themselves in a worse position than they were at present even if they made no call.

Mr. OATS moved that a call of 5s. per share be made.

Mr. SHARLE seconded the motion, and it was carried.

The CHAIRMAN said that on a share list of 2395 shares the call would bring in £600.

The call was ordered to be paid by October 8.

Mr. H. OLDS said he did not think they should let the opportunity pass without congratulating the committee on the work they had done during the past. They had been of great benefit to the mine, and shareholders, even if only through the introduction of tin ticketing. The sale of their tin had been something like 2 tons less than for the last 16 weeks, and yet the cash received was £230 more.

The CHAIRMAN: The average last time was £37 2s. 6d., as compared with £39 11s. now.

Mr. OLDS said that was about £2 10s., despite the most miserable prices of tin that had reigned. He wished to return his thanks for what they had done, as he thought their action had meant £2000 to the mine.

Mr. OATS said that whatever had been done in the way of ticketing had been done on the suggestion of Mr. T. B. Bolitho. No single man on the committee was entitled to any particular praise for what had been done, and Mr. Bolitho's consent had been obtained to everything.

The balance-sheet and agents' report were adopted, and the company adjourned to dinner.

After the customary loyal toasts had been honoured, Major WHITE proposed "Success to Levant." He regretted the low prices which had prevailed in the tin and copper market, and he was sorry they had no dividend to give to the shareholders, and he thought that in a mine of such magnitude as theirs the shareholders ought to have something for their money. One of the directors at the dinner meeting said that the mine must be made to pay irrespective of the price of metal, but his opinion was that it was no good raising stuff at unremunerative prices. Their mine was turning up as satisfactorily as they could wish as regarded output, and if the price increased there would, no doubt, be much brighter times in store for them.

Captains MADRON TREMATH, SAMPOON MURRISH, and JOHN WHITE, the agents, responded.

Captain MURRISH, in the course of his remarks, said he had been told the previous evening by one of the workmen in the 300 that







## PARIS LETTER.

(FROM OUR OWN CORRESPONDENT.)

**Bearing manœuvres in the mining market.—Attempted changes in the liquidation arrangements.—Position of South African shares.—Mining enterprise abroad.—Metalliferous mining in France.**

THE susceptibility of the mining market to the manœuvres of the bearing element has been very marked during the past fortnight, when timid holders have been repeatedly frightened into realising by events that, under no circumstances, could have any permanent influence upon gold mining shares. It must, however, be recognised that there is undoubtedly an affinity between mining speculation and general finance, for the Paris market owes its stability almost entirely to the support given to it by the leading financial concerns, and so soon as these are obliged to turn their attention elsewhere the market becomes weak and unsettled. Thus the incidents in Armenia, Macedonia, Crete, and Constantinople have all compelled the great houses to momentarily abandon gold mining shares in order to prop up the tottering finances of Turkey, and the market being left to itself became an easy prey to the bears, who presented the situation in the light of a crisis. No sooner had these fears been overcome than the Kafir market was menaced from within. The bankers proposed to protect themselves from the reckless dealings of the professional speculators by insisting upon a "margin" of 20 per cent. below the current quotations of the scrip for the carrying over of accounts at the settlement. This was energetically resisted by all classes on the Bourse. Some of the jobbers themselves, who have scarcely yet recovered from the crash of last autumn, would find in this "margin" a serious stumbling block, and as they would have to impose the same condition upon the outside speculators, a great many of these latter would probably find a small balance on the credit side at the settlement turned into a deficit. Then, again, the investors themselves would suffer from a depreciation of their scrip through forced realisations, and this, in fact, is what has taken place during the past week. Holders feared that their position at the settlement would become very precarious as the result of these new obligations, and where they have committed themselves beyond their means of prompt settlement they have hastened to realise. The situation has been deemed so serious that the Coullisse has taken up the matter with a good deal of energy. The committee informed the bankers that they would not consent to the "margin," and members of the Coullisse were told that, in the event of their agreeing to the bankers' proposal, they would be invited to take their names off the official list. As the result of this stand, the financial houses have stated that they will not insist upon the "margin" as at first proposed; but it is stated on the Bourse that one or two of the bankers are still holding out for the reform. The general impression, however, is that it will certainly be abandoned altogether.

Another thing that is affecting mining shares just now is the report that there is to be a fortnightly liquidation of gold mines, instead of monthly, upon the plea that the business in these shares is so heavy as to necessitate a more frequent settlement. It may safely be held that this is merely a bearing manœuvre, and that the committee of the Coullisse will lose no time in giving a denial to the statement. As a matter of fact, individual members of the Coullisse are strenuously opposed to a fortnightly settlement; and it is hardly conceivable that the committee will go against the wishes of the whole body. They very strongly criticise the practice of having a fortnightly settlement on the Stock Exchange, as they consider that it is quite unnecessary, and interferes seriously with business over here. There is little doubt, therefore, but that the Paris Bourse will continue to have its monthly settlement as heretofore.

Subjected to these influences, the market has been very quiet during the past week, and now and then the heavy realisations threatened to cause another setback. As, however, the more far seeing speculators immediately took up most of the shares on offer, the values did not decline to any large extent. The situation has been further improved by the increasing confidence of investors. These are more than ever convinced that the future of the Rand industry is an extremely brilliant one, and the absence of any of those alarmist reports, which have for so long a time past been throwing the market into a state of ferment, seems to confirm them in this belief. Moreover, it is fully expected that these crushings for August will continue to show a rapid development of the industry, in which event there is every probability of a rise in values. For the moment there is not much likelihood of quotations changing to any great extent on their present level. Speculators are displaying considerably more caution than they have been accustomed to do, and they are much less liable now to those fits of optimism and depression that made them mere puppets in the hands of the bulls and bears.

Outside of the Kafir market there is little doing in gold mining just now. Nevertheless, rather more attention is being paid to the Westralian mines, which have long been held to be an investment for the future rather than for the present, but the excellent results now being obtained are awakening an interest in these resources that cannot fail before long to attract a good deal of French capital. Shares in some of the mining companies nearer home are being taken up more freely, and preference is shown at the moment for such concerns as the Monte Rosa Gold Mining Company, of which the latest reports are very satisfactory. So far as the active process of mining development is concerned, the French capitalists are pursuing a policy of active enquiry preparatory to launching out in the flotation of new companies. As they have only begun to take an interest in auriferous countries outside the Transvaal during the past few months, they are anxious to study the resources of the various territories before embarking upon new enterprises. The present is, therefore, a period of prospecting and enquiry rather than of active development. French engineers have been sent out to nearly all the gold-bearing countries, in order to see whether there be an opening for the profitable employment of capital, and there is little doubt but that in the course of a few months the financial houses will give their patronage to promising concerns. Russia continues to be one of the leading countries in which the French are nursing the hope of building up an extensive and profitable industry. Already a large amount of French money has been sunk in the Siberian gold mines, and this participation will be facilitated by the new Russian company laws which have been drafted upon those obtaining in Western countries. In the future it will not be necessary for foreign capitalists to secure the special permission of the Russian Government to float companies in that country, and all that they will have to do will be to undergo the usual formalities of registration.

The precarious situation of metalliferous mining in France has long been attracting the attention of political economists, who point to the time when the industry will practically cease

to exist unless something be immediately done to place it upon a more satisfactory basis. While insisting upon the seriousness of the evil, however, they seem to be quite incapable of ascertaining the cause, and, consequently, of suggesting remedies for giving renewed prosperity to the mining industry. It is generally admitted that the urgent need of the metalliferous mining companies are greater facilities for transport. To a certain extent this is no doubt true, but even improved railway facilities will not suffice to make mining profitable unless certain other conditions are fulfilled. The difficulty lies almost entirely in the character of the French iron ore deposits and their distribution. Except in the Loire the coal and ironstone do not exist in proximity. In the Nord and Pas de Calais ironmasters have an abundance of coal, but they have to procure much of their mineral from the Meurthe-et-Moselle, and makers in this latter district are mainly dependent upon the North of France and Belgium for their fuel supplies. The mining companies, however, cannot secure higher prices for their mineral, in consequence of the foreign competition, and they consequently have to bear the burden of the transport charges. If these were reduced, no doubt the companies would experience a great relief, but they would secure still better results by economical working. In the Loire several ironstone mines have been abandoned as unprofitable when, by pursuing a more rigid system of economy, they could be made to pay their way. The necessity of coming to some prompt solution has induced the Minister of Commerce, M. Henry Boucher, to pay a visit to the mineral districts, and he is at the present moment making a personal enquiry into the conditions of the ironstone industry in the Meurthe-et-Moselle. It appears that there is a large area of mineral-bearing territory on the confines of the Ardennes almost entirely untouched, owing to the absence of railways, the military authorities having objected to the laying down of new lines so near to the frontier. It is hoped, however, that as the result of the investigation of the Minister, the companies will be permitted to open this territory by means of new lines, and that some decision will be come to for the general improvement of the ironstone mining industry throughout the country.

## NEW ZEALAND GOLD FIELDS.

(FROM OUR OWN CORRESPONDENT.)

JULY 28TH.

**A** GAIN I have to chronicle a very active month's business in our gold mining industry throughout the whole of the peninsula, both as regards the actual development and the demand for thoroughly genuine properties. In the latter the demand is so strong that large tracts of land are being pegged off in almost every part of the field.

Regarding the actual development in a number of mines in the different centres, it cannot be otherwise said but that a great extent of useful exploiting for the precious metal is being vigorously carried on, and the success attending these works is of a very gratifying character.

During the month the Coromandel district was the scene of considerable excitement, due to the ore from the Hauraki North Gold Mining Company proving to be of exceptional richness. Although no gold was visible in the ore, still it was proved by assay to be worth £2000 per ton. The balance of the parcel of ore from which the assays were selected was subsequently treated. The parcel contained between 15 to 16 lbs. of rough ore, from which Mr. Burns, Assayer to the Bank of New Zealand, extracted a small bar of gold, which weighed 8½ ounces, worth £2 12s. per ounce. The phenomenal richness of the ore caused quite a flutter in stocks in the surrounding mines, and since then Coromandel mines have been on the advance, with a steady demand for shares in claims lying adjacent.

The negotiations which have been in progress for some time past for the flotation of some of our most important mines in various parts of the peninsula has at last been concluded, and the required capital has come to hand for development work.

To-day, July 28, information has been received from the Hon. Wm. McCulloch, M.L.C., who is now in London, that the Central and Pilot Special claims and the Waitekauri amalgamated properties were all successfully placed with good strong capital for their respective developments. The former property is situated in the Komata district, and lies adjacent to the Komata Reef Company, and surrounded on all sides by mines of very high repute. Some large lodes have been opened up and proved to be highly auriferous. Regarding the Waitekauri Amalgamated, it is situated to the eastward of the Waitekauri and Waitekauri Cross Companies, and according to a recent survey of the reef in the Waitekauri Company's works, their reef was found to be trending an entirely different course to that at first supposed. The surveyors found the lode to be striking 44° east of north with an underlie to the westward of about 28°. According to the calculated distance the Australian section of this property would embrace the lodes easterly, and trend for a distance of about 35 chains, after it passes through the Waitekauri Cross. This strike would quite correspond with the Wharekaurapunga lodes' system, from which excellent results have been obtained.

Apart from the above-mentioned mines, others in the different districts are also earmarked with British capital.

## Broken Hill Mine (Tairua District).

In my last letter I referred to Mr. Jonathan Seaver and the very foolish business transaction he made in connection with this property, in disposing of his option of the flotation to one J. A. Alison for the sum of £400. Fortunately for Seaver no money exchanged hands at the time he wrote to Alison declining to sell. If that a cash deposit had been paid by Alison at the hour the business was transacted, then Seaver could not possibly have backed out. Still, the £4000 cash had to be paid the following day at 3 p.m. Before that time had elapsed Alison deposited £4000 with Seaver, but that individual, seeing the grave mistake he had made, declined to accept. The consequence was, Alison sued Seaver, but as aforesaid no coin having changed hands at the time the business was first transacted, the consequence was the case had to be discontinued. And now Mr. Leo Myers, representing the Anglo-Austral Syndicate, has purchased on behalf of his company a large interest in this rich mine; and to-day (the 30th July) a cable has been received to the effect that a company has been formed to work the property on a gigantic scale.

Machinery has to be erected, and the systematic development of the mine is to be commenced at once. It will be remembered some time ago an account I wrote of a general inspection of the lode discovered on the property. Since that time the lode has again been intersected, and proves to be phenomenally rich as depth was reached upon it. Another important feature is that the lode has become more defined and solid in appearance, and I have not the slightest hesitation in saying that if the lode should continue its present appearance, and maintain its quality, that the mine will prove to be the premier mine of this gold field as regards bullion production, and must eventually do a great amount of good in assisting the introduction of British capital for the de-

velopment of our mines. There is no denying the fact that the lode is a very rich one; still it must be borne in mind that in various parts of this peninsula pockets and rich shoots of ore have been met, but they have in many instances failed to continue; and I would very much like to have seen more work done upon the ore body at a still greater depth before forming a company. However, before commenting further, we will have now to wait for further developments to reveal if the rich deposit is of any extent.

Regarding the developments in the Whangamata and Wharekaurapunga districts, which lie to the south-east of the Tairua, it may be said that a large amount of useful prospecting is being conducted in the former district, but nothing of any great importance has been met with during the month.

Messrs. Bewick, Moreing and Co., who have representative here, and who have acquired several properties, are going the right way to work, and instead of rushing properties on to the market they go in to spend a sum of money to prove the lodes and ascertain if they are worthy of development or not. By this system of operations the company will escape being saddled with worthless areas of ground. I must, however, give them credit in their choice in selecting properties, for they have hit upon some of their pet areas, and, what is more, they are giving them a thorough exploiting and testing the value of the lodes both in extent and at depth. At Wharekaurapunga some very serviceable work is being prosecuted in the prospectors' claim, and, taking the average character of the ore, there is every reason to believe that the master lode, which is fully 40 feet in diameter, will pay handsomely, judging by the quality of the parcel treated at the Thames School of Mines, which realised at the rate of £15 to £17 per ton.

## Waitekauri District.

There is nothing new to report from this busy centre of mining. Everything in connection with the parent company appears to be progressing most satisfactorily, whilst the surrounding mines are, in most instances, conducting a large amount of development work. The Waitekauri United Company have two main adit levels in progress, which are being driven in opposite directions to eventually connect with one another.

The main range through which these prospecting levels are in progress rises to a very high altitude, and as regards backs it is unrivalled; every facility is afforded here for cheap mining, and the course taken by the two adits mentioned will prospect a great extent of country, through which several lodes of high repute are known to exist. I view this work as one of the greatest importance to the company, and in a great measure the future success of the company depends on it. The work is in very able hands. Mr. Fred Stone, a gentleman of considerable practical mining knowledge, is in charge, and I feel sure it will not be for want of tact or energy that the works in hand should fail to reveal good results.

## Waihi District.

The premier gold mine, the Waihi Gold Mining Company, is steadily advancing its developments, and the class of ore won from the different sections is much the same in quality as has been treated heretofore. One month's return may outclass the other; still, the depreciation, if any, is only due to the works, perhaps, passing through a poorer section of reef to what was mined for the month previous.

There is a slight falling off this month compared with that of the preceding one, but that is insignificant when it is generally known that there is steady work on highly profitable ore for many years to come. It will be seen that last month's yield is much higher, but the month previous to that is comparable with that which has come to hand for July.

## Waihi Silverton Company.

This company are pushing on with their development work, and, on the whole, very satisfactory headway is being made. From latest advices to hand there is every indication of a superior class of ore coming to hand, but as to how long it will continue remains for further developments to reveal. Still, I am very hopeful of seeing this company's mill kept in profitable employment for a considerable time to come. It will be seen that the last return to hand is a highly profitable one, and judging by the class of ore, Mr. Pond, the managing director, has every reason to believe that this return will be greatly improved upon. For a period extending over one month 1055 tons of ore were milled and subsequently treated by cyanide for the good return of 967 ounces of bullion, valued at £2417.

## The Grand Junction Company

Have reached the solid formation, after sinking to a depth of 400 feet. It will be remembered that in my letters of the past that, judging the inclination of the mud rock lying upon the solid country at the No. 2 level of the Waihi Gold Mining Company's works, I calculated that 400 to 500 feet would have to be sunk to reach the solid country. My views with regard to that are now quite borne out.

As soon as the chamber is completed which is now in progress a commencement will be made to extend the crozier to, if possible, intersect the Martha reef, which, according to its calculated strike, should trend in close proximity to the shaft. Much depends on the intersection of this celebrated lode, for, in the event of its continuity being proved in this direction, it will not only considerably enhance the value of this company, but will also greatly strengthen the future of the Waihi Gold Mining Company.

## Owharoa District.

This district is gradually assuming a lively attitude, and a vast amount of development work is being prosecuted in the various mines, but latterly nothing of importance has occurred that calls for special mention.

## Karangahake.

Steady active developments are being conducted in the most important mines in this district, and in every instance good results are being obtained.

## New Zealand Crown Mines

Continue to open up on the south strike of their reef ore of a highly auriferous character. The ore reserves are very extensive, and every day's labour advances the south drive into new and unexplored regions. Strange that this famous lode, as it strikes on its trend, is gradually diverging towards the west, and its great underlie in that direction carries it clear of the course of where it was calculated to traverse. This is all the better for the company, because the outcrop of the lode is well along the eastern boundary, and with the high inclination as stated this company would have the full underlie of the lode in their property.

The company's additional stamps which have been in course of construction for some time past are now well forward, and should be in readiness to commence milling almost immediately; this will mean that the present tonnage of ore that is being treated will be greatly increased, and the output of gold considerably augmented accordingly.

## Woodstock Gold Mining Company

This company are pushing on with the development work, and considerably increasing their ore reserves. The erection of the new reduction plant is not progressing as satisfactorily as



could be desired, still, considering the delay in procuring the required material to proceed with the construction, very fair headway is being made. However, when it is finished it will be a very complete plant, and one that will be able to reduce a large tonnage of material.

#### Tallman Company

Are opening up large ore reserves for stoping purposes, and otherwise preparing for the extensive delivery of ore to their mill.

Other mines in this district are all assiduously pushing on their prospecting works. Amongst them is the Victor Waihou Company, who have been carrying on a series of prospecting works with a view to pick up the Crown reef, but that idea, I think, may be cast to the winds, because the reef trends away to the west of this company's grounds. Still, there is a chance that something of importance may be discovered in one or other of the works in hand.

#### (THAMES PROPER).

##### Thames Hauraki Gold Fields Company.

The stripping and enlargement of this company's main engine shaft is progressing splendidly, and at the time of writing, a total depth of 275 feet has been reached from the collar of the shaft. The original No. 3 chamber has been passed through, and the work in hand is proceeding without a hitch, thanks to the careful supervision of T. Aitken Dunlop, the company's manager.

The No. 2 shaft in the Deep Sinker section of this company's property is also making satisfactory headway, and a total depth of 75 feet is reached. The country met with here is of a sedimentary character, but the last few feet of sinking is meeting with a dark grey decomposed country, which is much firmer to sink through. Up to the present little or no water has made its appearance, but how far sinking can be carried down without meeting with water remains to be seen. As stated in my last letter, this shaft should enter all new and untried country, consequent upon this the developments here are watched with great interest. It is, I believe, the intention to conduct other exploiting works in other parts of this company's area, and in all probability something of importance will be met with.

##### Monatairi Gold Company.

The work in hand in this company's mine is being vigorously pushed ahead; but as the most important works (which it is anticipated will lead to something good) are only beginning to blossom into development on a large scale, it would not be wise to even offer an opinion as to the probable results of these works, as we will have to remain quiet, and see what the exploiting will reveal.

Mr. F. A. White, the gentleman who floated this property, is again about to take a trip to England, with, probably, a view to place other properties. There is one thing about Mr. White, and that is, I do not think he will offer for investment properties otherwise than genuine mines. He is a gentleman of high standing in this country, and for the greater part of his life he has always been an ardent and true advocate of the staple industry of the country to which he belongs, having acted in the capacity as legal manager to the Monatairi, Hazelbank, and the celebrated dividend-payer, the Warotahi, which, it may be mentioned, continues to produce dividend-paying returns. There is really nothing new from the old mine to chronicle. Steady development work continues under the very able supervision of Mr. James Smith, who, it may be said, has managed this mine for about 15 to 20 years, and it is mainly due to the splendid efforts and judgment of Mr. Smith that the mine maintains its present prosperity.

##### Kurunui-Caledonian Company.

This company have not commenced any new developments yet, but are merely confining themselves to the lodes and ore reserves, which they have been operating upon for a considerable period past. The mine continues to look very well, and the ore coming to hand shows gold very freely, whilst in addition to that a few pounds of specimen ore is very frequently met with when breaking down the ore body, and where that class of material is obtainable there is always a chance of meeting with heavy deposits of the same class of ore as the development work proceeds.

##### New Alburnia.

Driving upon the course of Dixon's reef eastward of the main engine shaft is now in active progress. The lode at this point is fully 3 feet in diameter, carrying mineral of the right description for gold; in fact, it is the intention to also commence stoping here and send the ore to the company's mill for treatment.

##### Puru District.

Judging by the prospects met with in this district there is every indication of the locality proving to be one of our chief producing centres. This is in a great measure due to the energy of the Puru Consolidated Gold Mining Company, who have opened up their Rimu reef for a distance of 220 feet; the lode shows an average thickness for the whole of that distance of 3 feet, with strong blotches of gold freely distributed. Another large body, 6 feet thick, trending a parallel course to the Rimu, has also been opened up; this lode shows gold freely, and by assay yields an average value of £10 per ton.

Mr. J. Jenkin Cooper has the option of flotation, and as the area is 478 acres, with abundance of water for motive power, it should in time be one of our leading mines. Mr. Cooper has evidently his wits about him, because he has secured some of the best properties in this district.

##### Puhpuhi Gold and Silver Field.

The Auckland Star correspondent says of this field that it is rapidly coming to the front. An assay of stone from a claim called the Norma Extended has given a return of 41 ounces of bullion to the ton. He goes on to say that the new machinery for the British Gold and Silver Company's property is now on the ground. The furnaces for Mr. French's process are being rapidly pushed forward, and most of the bricks for this work are ready. There are over 2000 acres on this field taken up and applied for, and pegging is still going on.

It may be mentioned that this part of our mineral fields is situated in the Whangarei district, away to the north of Auckland. For many years past rich runs of silver ore were unearthed, but the machinery brought in to treat this complex ore was quite inadequate to deal with it; but since Mr. French, a metallurgist of repute, commenced experimenting, the results met with were sufficient to satisfy those concerned that they have an excellent future before them if they erect the required machinery and treat their ores on a large scale. The lodes are large, and trials in the past have proved them to be rich in bullion.

##### Latest News.

AUGUST 10.

On the very best authority I learn that a new and important discovery has been made in the Waitekauri Gold Mining Company's ground.

It appears the development work was extended into the western section of the company's mine, with the result that the Golden Cross lode, being driven upon in the direction of the Central Company's ground, has been proved to be worth from £5 to £9 per ton. The lode is from 5 to 9 feet in diameter, and

this rich shoot of ore is quite a distinct one to that under development in the Mann-Corbett level. It may be mentioned that the discovery was made about 1400 to 1500 feet from the Central Company's boundary.

This should be very gratifying news to the people who purchased the latter in London recently, for without much outlay this celebrated lode should be unearthed, and may prove to be of even richer quality than what it is in the Waitekauri Company's ground. I may point out that the Central has an area of 217 acres, and comprises the Pilot and other properties adjoining the Waitekauri Company's ground. It will be seen by the foregoing that the English investors have secured a sound and genuine investment, which should give handsome results with systematic development.

The Tararu Creek Company have, in the extension of their low level west upon the lode, discovered splendid ore, and, according to the calculated dip of the run of gold being sunk upon 200 feet overhead of this discovery, the management are of an opinion that this run met with is the downward continuation of the strike of gold.

Ten more stamps were started on this ore, which assays splendidly, and shows free gold to the naked eye.

It is the intention to keep one of the cyanide vats on this ore, and one on the mineralised material, which will be further treated by concentration.

##### Waitekauri Gold Mining Company.

The whole of the stamps in this company's new mill should be in readiness to commence treating in a month from now. Ten stamps at the new mill and 10 at the old mill have been employed during the month, but the return has not come to hand yet; 4½ miles of tram line for transmitting the ores from mine to mill has been completed. Shaft has been sunk to a depth of 229 feet. At a depth of 129 feet the level has been opened out. The boiler has been placed in position, and all other appurtenances are in progress. The main low level tunnel has been driven a total distance of 795 feet, and the crosscut to intersect the Empire reef has been extended 639 feet. Other levels are all under vigorous operation.

##### Waitekauri Cross.

I have just met Mr. W. Eddowes, the inspecting engineer of this company, who has been on his tour of inspection. He informs me the low level being extended eastward has reached a total distance of 408 feet. Here the Taranaki lode, it is anticipated, will be intersected at any moment. The country, Mr. Eddowes says, is of the right class, and there is just a good chance that this large body may prove profitable when developed. The western crosscut has been advanced 211 feet through a very good class of country, but owing to the undulating lie of the country, there is reason to believe that the Golden Cross lode will not come to within the level of this tunnel, consequently an opinion exists that a shaft will have to be sunk to a reasonable depth, then crosscut for this famous lode. In places, it may be mentioned that the quartz body does not come up to the surface, but makes strong and defined as depth is reached upon it.

To the north of Waihi a large body of ore has been struck in a claim known as the Paul Jones Company. This huge body has been traced for several chains. The ore is of a white flinty nature, similar to the ores in the Waihi district.

##### Maori Dream, Kusotunu.

After 50 feet of driving in this company's low level the reef has been intersected and cut into for a thickness of 5 feet, producing good prospects of gold.

As can be seen by the gold returns there is a substantial increase, and I have not the slightest hesitation in predicting a still further increase, especially when the increased milling power is in full working order with the different companies. There is abundance of ore for treatment, and new series of lodes are being unearthed daily.

## NEWS FROM WESTERN AUSTRALIA.

CUTTINGS FROM THE LOCAL PRESS.

(From the Gold Fields Courier.)

WITH regard to the mines to the south of Burbank's Birthday Gift, a district, the development of which is now being watched with great interest, we learn that the Fair Nell, block No. 1799, the Empress of India, block No. 971, and a small triangular section lying between the former and Burbank's United, No. 2869, have been amalgamated under the Grand Junction, the property of Messrs. Bewick and Moreing. The crushing recently published from the Grand Junction, showing a return of 5 ounces 2 dwts. to the ton, was, we understand, from stone taken from the several dumps on all the blocks. The rich reef lately struck on the block between the Fair Nell and the Burbank's United has been traced and found to traverse the south-west portion of the latter block, which is now being actively developed by a Perth and Coolgardie syndicate. Several additional hands have been put on to continue the sinking of the north shaft. It is intended to crosscut for the reef at the 75 feet level. In the southern shaft it is intended to open out at the 100 feet level. A shaft will also shortly be sunk to cut the reef that is found to continue into the property out of the Grand Junction.

Writing of the Ivanhoe crushing a local mining reporter says:—"The return shows the richness of the eastern lode, which was opened up only a few weeks ago. Not only is the lode very rich, but it is also wider than was thought. At the 100 feet level a drive has been carried 30 feet north of the shaft on the course of the lode, and the south drive is in 15 feet. For the whole of this distance the lode averages 10 feet in width, and appears to be still opening out. At the bottom of the shaft it was 8 feet wide, but opened out as it was driven on both north and south. The main lode is also opening up splendidly; the slope near the south shaft at the 100 feet level being 20 feet wide. There is an immense amount of stone in sight in the mine, and as the new 15 head battery is being erected as speedily as possible, in a few months the mine should have a big output, or, as many state, will equal the Boulder as a gold producer."

Some recent assays of stuff from the Perseverance Mine have given sensational results. There were four assays altogether. The results of the first were, 26 ounces of gold, and 61 ounces silver; of the second, 37 ounces of gold, and 82 ounces silver; of the third, 45 ounces of gold, and 82 ounces silver; and of the fourth 45 ounces gold, and 87 ounces silver. The stuff was taken from the winze 60 feet below the first or 100 feet level, and about the water line. The reef there is 6 feet wide. Ordinary ditch trials had given the value of the ore at about 1½ ounce per ton. The dolly and dish revealed the free gold only. The fire showed how rich the pyrites were.

A locality which has every promise of assuming an important position among the gold producing centres is Giffithston, about 150 miles north-east of Coolgardie and close to Lake Crey. Mr. M. W. Haward, one of the pioneers of the new field, who

is at present in Coolgardie, gives some interesting information. He states that within the last four months 652 acres of ground have been taken up, and this section of the gold-bearing country is being developed as quickly as men can be obtained to man the leases. The British and South African Gold Recovery Company have taken up three miles along one line of reef which they have named the Great Aber, one mile along a second line known as the Greenhill. Two leases, already developed to a depth of 70 feet, have turned out even better than the anticipations formed of them. Between the Great Aber and Greenhill two other reefs have been traced; one, the Mount Wilgoss, has been proved and taken up for 2 miles, gold showing whenever the reef has been napped; the second, the Mary Hill line, is equally as promising. These parallel reefs, which are composed almost invariably of blue quartz, through which fine gold is well dispersed, are attracting a good deal of local attention. There are about 50 men on the field, and it is a good sign that the working miners are devoting their spare time to prospecting and securing leases of their own. As showing the rapid progress of the place, Mr. Haward mentions that there was a "roll up" for the purpose of electing a progress committee. A site has been selected for a township, Mr. Haward being deputed to carry the petition to the acting Warden at Menzies. A store has already been started, and as soon as the license can be obtained there will be a hotel.

The Brown Hill crushing of four weeks' stone has been cleaned up; 119 tons were treated, yielding 247 ounces, or an average of 2 ounces 11 dwts. 18 grains.

Good gold has been struck in a formation in the west drive from a shaft on the I.O.U. Block, one of the I.O.U. Development Company's properties. The Raud Blocks of the same company also carry visible gold.

A big mullocky lode formation has been struck in the Knight of the Garter lease, Broad Arrow, and reports say that it assays well.

A new find of gold is reported 6 miles east of Golden Valley. The news comes from Mr. Persson, of Southern Cross. The discovery consists of a large outcrop of quartz, the reef being nearly 100 feet wide, and is reported to carry good gold.

A promising lode has been discovered in Block 45, between the telluride lode and Kelly's reef. It has been opened up by a costeeen, and the stone is of a quartz nature and carries coarse gold right to the surface.

It is reported here that a very rich find has been made in the Great Stanley Mine, Mount Monger, in driving at the 60 feet level. The lode is filled with clay and deposited gold. The manager states that the whole of the reef, measuring 6 feet from wall to wall, is full of fine gold.

A great improvement has taken place in the No. 2 Great Norseman Mine. The lode was cut at a depth of 50 feet in the north-west corner of the ground. Evidently the reef is running from the Mount Barker line to the North Norseman. It is 2 feet wide, and shows nice gold. The manager has taken up additional ground.

Rich stone is being sent up from the North Norseman at a depth of 100 feet. The lode is getting richer as depth is attained.

Bevelagua's battery, tramway, and several mines have been sold in one lot to an English company. The sum has not transpired.

Campbell's party, of the Killaloe Mine, have struck the lode in the vertical shaft at 49 feet. There is an immense formation, all gold-bearing. A vein of 2 feet of quartz is immensely rich, at some places being over 100 ounces to the ton. The whole of the 2 feet vein will return 15 ounce. It is the richest find in this field.

#### From the Western Argus.

"A sand has been secured for the Lake View Consols Mine, and as soon as it is in position will force the tailings to a considerable height, and thus save the great cost of handling the slimes in cleaning out the settling pits. The tailings will be run on to the top of the old pile, and the water draining from them will be caught in races at the base of the dump, and conducted back to the supply tank. By this means the great expense of digging out and carting away every ton of tailings from the mill will be saved, while the water will be returned to the battery tanks clearer than under the old system. An additional 10 head of stamps had been ordered for the View, and it is understood the new plant will be gradually increased to 100 head of stamps. The new plant will be placed on the crown of one of the hills on the mine, so as to enable amalgamating pans, and in the future cyanide vats, to be erected below the level of the mill. There is no doubt the View and the Boulder will have to treat their tailings by the cyanide or some similar process, especially the tailings from the mill during the early rough days, when the water was scarcer even than now and methods more rough. The mine is such an immense one, with its half-mile in length of 12 feet wide lode and its as yet undeveloped parallel lines of reef, one of which is the famous Australia line, then even with a battery of 100 heads in full work for the balance of the company's 21 years' lease it cannot make much impression on it. It is, therefore, wise for the consulting engineers to make provision at once for the necessary machinery. Mr. Banks, an experienced American manager, has been appointed mine manager, and Mr. H. C. Callahan will take up the duties of general manager. Both are men of world-wide experience, and there is no doubt under their management the mine will have full justice done to it. Owing to the enormous interests he has secured on the fields, it is not improbable that Mr. C. Kaufmann will shortly take up his residence in Kalgoorlie, as he is not the man to tolerate the experience of some of the non-resident consulting engineers, who in not a few instances have completely ordered shafts to be sunk on properties after a 10 minutes' inspection, and subsequently found their managers have, in consequence, been compelled to sink from the surface in diorite, while within a few feet soft ground was known to go down to a depth of 200 feet."

## DIARY.

### Tuesday, September 15.

Highland Chief Gold Miner, Winchester House, 12.  
European Petroleum, Winchester House, 230.  
Bendigo Gold Fields, Finbury House, 3.  
Macate Mining, Winchester House, 3.

### Wednesday, September 16

Forrest Australian Corporation, Winchester House, 12.  
Kaboona, Winchester House, 12.  
New Julia Nitrate, Winchester House, 2.  
New Kleinfonlein, Johannesburg.

### Thursday, September 17.

Tokatea General Gold Miner, Winchester House, 12.  
Casel Coal, Johannesburg.

### Friday, September 18.

Alice Gold Miner, Carlson Hotel, 11.



## LATEST FROM THE MINES.

## CABLEGRAMS AND TELEGRAMS.

**ARMADALE.**—The following cablegram has been received from the consulting engineer:—"Poppet heads erected."

**ANGLO-CHILIAN NITRATE RAILWAY.**—Gross traffic receipts for month of August, £8500. Corresponding period in 1895, £14,500.

**BAKER'S CREEK.**—Result of crushing to September 4, 515 ounces retorted gold.

**BARBERTON ESTATES.**—The London directors have to announce for the information of shareholders that Mr. Thomas Hey Hayles, the manager, who has been appointed in place of Mr. Pope, resigned, in his report to the board, disagreed with the conclusions his predecessor had come to as regards the value of the property. The board of directors in Johannesburg thereupon decided to retain the services of Mr. F. H. Hatch, Ph.D., the mining engineer, to report upon the property. A cable message has now been received from the head office, which reads as follows:—"Hatch's report is unfavourable; confirms latest reports; 94 average samples assayed 3 dwts. 13 grains, including Eureka; 38 average samples assayed 5 dwts. 1 grain. Report forwarded by mail September 7."

**BARRETT GOLD.**—A cablegram from the mines gives August gold return as 625 ounces. The dry crushing machinery had arrived and was in course of erection. First results gained by direct treatment very satisfactory, averaging 93 per cent. of the assay value of the gold contained in the ore. Tram working well, and stocks of ore rapidly accumulating at the mill.

**BAYLEY'S No. 2 SOUTH GOLD.**—Translation of cable, dated September 10, received from the mines manager, Mr. W. H. Vivian:—"Bayley's No. 2 South. The workings show considerable improvement. South level reef (s) 12 inches, assaying 3 ounces 5 dwts. per ton."

**BLAGROVE'S FREEHOLD.**—The directors have received the following telegram from the manager:—"The width of the reef in the crosscut is 2 feet, showing traces of gold. Have resumed sinking."

**BLOCK B. LANGLAAGTE ESTATE.**—Production for August, by cable:—"Mill. Stamps running, 75; ore crushed, 8711 tons of 2000 lbs.; gold retorted, 2257 ounces.—Tailings. Cyanide process. Tons treated, 4730 tons of 2000 lbs.; gold recovered, 660 ounces.—Concentrates. Cyanide process. Tons treated, 182 tons of 2000 lbs.; gold recovered, 361 ounces; total gold recovered, 3278 ounces."

**CITY AND SUBURBAN.**—Last month's crushing yielded 794 ounces.

**COBAR.**—Copy of cablegram received:—"O'Gorman has made a most careful examination of the mines. A fine body of high grade ore 150,000 tons. Could be worked through whole length of 700 yards by open cut. Adit is being driven to cut the vein running north and south. Every economy must be used, including air drills for mining ore, so as to handle in large quantities. I strongly recommend 100 stamps of 950 lbs. each, wet crushing, latest improvements. Water in any quantity obtainable; cutting tanks before heavy rains November. From this you will see the first works to be done are tanks, and connect railways with reduction works. Went most thoroughly into every detail from a financial point of view; confident of success."

**CONSOLIDATED GOLD MINES OF WESTERN AUSTRALIA.**—The following cablegram has just been received from the manager of the Coogah Mine:—"The net value of the gold on realisation, £810. The ore comes mostly from the 75 feet level. The damage to the boilers has been repaired. Have recommenced work. Mill is working day and night."—The following cablegram has also been received from the manager of the company's properties at Toweranna:—"The pumping machinery in shaft will be completed by September 30. Battery is in course of erection. Will be completed about November 30."

**CROWN REEF.**—Results for August, received by cablegram from Johannesburg:—"Number of days working 120-stamp mill, 29 days 18 hours; crushed by 120-stamp mill, 16,318 tons; yield in smelted gold from 120-stamp mill, 6855 ounces; yield in smelted gold from 120-stamp cyanide works, 4579 ounces; yield in smelted gold from slimes works, 433 ounces; total, 11,867 ounces.—Working expenditure and revenue. 120-stamp mill and cyanide works, 16,318 tons milled. To mining, transport, milling, cyanide, treatment of slimes, general charges, maintenance, and mine development, £23,943; profit for month, £15,649; total, £39,592. By gold account—6855 ounces from 120-stamp mill, £23,859; 4579 ounces from 120-stamp cyanide works, £14,233; 433 ounces from slimes works, £1500; total, £39,592. Revenue per ton crushed, £2 8s. 6 3/4d.; cost, £1 9s. 4 1/2d.; profit, 19s. 2 1/2d."

**CUMBERLAND.**—The London office have received a cablegram giving the result of cyanide operations for July as follows:—"Tailings recovered 279 ounces from 340 tons, at a cost of £242. The estimated value is £600."

**CURTIN-DAVIS PROPRIETARY (No Liability).**—Cabled advice has been received by this company's London office from the head office in Melbourne, intimating that Mr. Knox, Chairman of the company, has returned from the mines, and that his inspection confirms manager's report. Prospects are very satisfactory. Railway will be available by December.

**DAY DAWN BLOCK AND WYNDHAM.**—This company have received the following cablegram from the general manager at Charters Towers, giving the result of the crushing for the fortnight ending the 5th inst.:—"Tons crushed, 1270; yield of gold, 961 ounces; approximate value, £3315; fortnight's expenses, £2170."

**DE LAMAR.**—The following is the cabled return for the month of August:—"Crushed during the month, 4357 tons; bullion produced in the mill, \$65,093; estimated value of ore shipped to smelters, \$4300; miscellaneous revenue, \$300; total producer, \$69,693; total expenses, \$43,990; profit for the month of August, \$25,703; or at \$4.00 to £ sterling £5246."

**DORIC.**—The following cablegram has been received from the company's manager at the mine:—"During the month of August Cosmos tunnel was driven 150 feet. Adit level No. 2 is driven 22 feet."

**EDJUNA.**—This company have received a cable from the agents as follows:—"Edjuna crushed 150 tons for 142 ounces. Crushing is proceeding."

**FERREIRA.**—Copy of cablegram received from Johannesburg, September 9:—"Results for August: Crushed, 9455 tons; bar gold extracted, 8614 ounces; concentrates caught, 228 tons; assay value of concentrates 6 ounces 10 dwts. fine gold per ton, equal to (say) 1469 ounces.—Cyanide works. Bullion produced from tailings, 3517 ounces. Total gold from all sources, 13,600 ounces."

**FERREIRA.**—Copy of cablegram received from head office, Johannesburg, reading:—"Profit for last month (August) from all sources, £28,574."

**GELDENHUIS ESTATE AND GOLD.**—Results for August.—A cablegram has been received from the head office, at Johannesburg, stating the following results for last month:

—"Crushed, 16,726 tons; obtained from mill, 4197 ounces of gold; obtained from concentrates by cyanide, 473 ounces of gold; obtained from tailings by cyanide, 1698 ounces of gold; total, 6368 ounces of gold; profit for the month, £3600. The decrease in the output is due to the falling off in the grade of the ore, but prospects are better in the lower levels."

**GELDENHUIS MAIN REEF.**—Result of August crushing:—"3050 tons crushed, yielding 1057 ounces of gold; 2110 tons treated by cyanide, 384 ounces of gold; total, 1441 ounces of gold. Profit for the month, £409."

**GELDENHUIS DEEP.**—The following cable has been received from the mine manager, giving the output for month of August:—"Mill ran 27 1/2 days, crushing 13,242 tons, yielding 3544 ounces. Cyanide treated, 8910 tons; yielding 1666 ounces; total value, £17,522. Working expenses for month, £19,181. Further expenses, £2294."

**GEM OF CUE.**—Mine manager's report for month of July:—"I have to report progress during the past month on works in above-named mine. Main engine shaft has been sunk a further depth of 23 feet, making a total of 101 feet. At 110 feet I purpose crosscutting south to strike the lode at that depth, and by driving west on lode connect the workings of main shaft with shaft A as per plan. I further purpose continuing sinking main shaft and obtain a supply of water for winding engine. In A shaft I have continued driving along course of lode west, now to a distance of 47 feet, 17 feet for the month, heavy shooting ground. Lode is from 18 inches to 2 feet. The stone, which for some time has been somewhat rubby, is now becoming more compact and solid, and improving in quality towards the western boundary. I consider very good progress has been made during the past month. No special developments may be expected until the lode is cut in main shaft as before stated. We will write you next mail fully as to the Stawell, known now as the Gem of Cue Extended."

**GEORGE GOCH AMALGAMATED.**—The following cable is to hand advising work done during August:—"9300 tons crushed, yielding 2216 ounces gold, and 1615 ounces from tailings."

**GINSBERG GOLD.**—The Johannesburg Consolidated Investment Company (Limited) announce receipt of the following cable from the above company:—"Production for August, 112 ounces, 10 stamps, 29 days."

**GLENCAIRN MAIN REEF.**—The Johannesburg Consolidated Investment Company (Limited) announce receipt of the following cable from the above company:—"Production for August 3389 ounces, 100 stamps, 25 days."

**GOLDEN DOVE.**—A cable has been received from the mine stating that the preliminary crushing of 100 tons has produced 85 ounces of gold.

**GRASKOP.**—The following cablegram has been received from the mine manager for the month of August:—"Ore treated 199 tons, yielding 164 ounces of gold."

**GRIERSON'S.**—The directors have received the following cablegram from the mine:—"Have sunk a new shaft more northerly, and struck a reef 3 feet thick. Ore contains visible gold. Assay value, 6 ounces 17 dwts. per ton."

**GREAT BUNINYONG.**—Alluvial shaft of dimensions for plunger chamber sunk 11 feet; full depth 130 feet; country at foot favourable to good progress. At the quartz shaft, water lodgment actively proceeded with, and expect to complete about the end of the week.

**HANNAN'S GOLDEN PEBBLES.**—The latest report of this property is in a letter from the manager, Mr. George Gray, dated July 28, of which the following is an extract:—"I am very glad to be able to advise you that the mine is looking very well, and everything in and around it suggests a very successful future to the property."

**HANNAN'S PROPRIETARY DEVELOPMENT.**—The following cable has been received by the Hannan's Proprietary Development Company (Limited) from their engineer, Mr. George Gray:—"Leases improving under development, particularly Oratava, Queen of the West, Ironsides, Lady Forrest, Kalgurli. A sample from the Oratava Mine at 160 feet assayed 2 ounces 15 dwts. per ton. On the Kalgurli I have met with a strong lode showing visible gold. Water is increasing in all the shafts. Water right is developing most satisfactorily; as soon as erected plant must give good revenue. The Lake View East is steadily improving. I am opening a new lode which is carrying good gold. New samples from the Kalgurli lode assay almost 2 ounces to the ton."

**HENRY NOURSE.**—Results for August: Mill ran 30 days; 60 stamps crushed 8548 tons, produced 4910 ounces; 5670 tons treated cyanide, produced 1874 ounces; total, 6784 ounces."

**HOLCOMB VALLEY.**—The manager, who is now returning to England, recently cabled:—"Through cement Nelson; we are now straining everything in our efforts to keep the water under. Prospects are decidedly encouraging for gravel." Under date of 20th ult., he writes:—"I have faith in the granite gravel scheme, and also in the quartz scheme in the California Mine, and feel confident that both will yet pay a good return to the company. Nelson shaft down 87-88 feet in gravel and sand, with cemented boulders, water, and some colours. As to the California shaft he reports that the incline from 80 level struck the lode on the previous, and that the shaft is being continued."

**IMPERIAL WESTERN AUSTRALIAN CORPORATION.**—Cablegram from the company's representative at Rosbourn:—"Trial crushing of 20 tons of ore from the Laffers Pioneer leases yield 35 ounces gold. The recently erected plant on the Western Shaw property will commence crushing this week."

**JUBILEE.**—Cable, dated September 8:—"Last month's crushing yielded 2150 ounces; last month's crushing yielded 5434 tons; last month's crushing yielded 801 ounces tailings."

**JUMPERS.**—Results for August:—"A cablegram has been received from the head office at Johannesburg, stating the following results for last month:—"Crushed 11,113 tons; obtained from mill 3829 ounces of gold; from concentrates equal to 374 ounces of gold; from tailings by cyanide 651 ounces of gold; total 4854 ounces of gold. Profit for month £2400."

**KINSELLA.**—Copy of cable received from the mine, September 7:—"Output for August. Ore mined, 800 tons; ore treated, 850 tons; bullion recovered, 290 ounces; mines, mills, and pans expenses, £1575; plant and other expenditure, £17; estimated value, total bullion, £950; mill ran, 25 days."

**LADY MARGARET.**—A cable from the manager, dated September 9, states:—"Have struck a flow of water (fresh) F shaft."

**LANGLAAGTE ESTATE.**—Production for August, by cable:—"Mill. By stamps running, 160; ore crushed, 21,298 tons of 2000 lbs.; gold retorted, 6745 ounces.—Tailings. Cyanide process. Tons treated, 12,320 tons of 2000 lbs.; gold recovered, 1909 ounces.—Concentrates. Cyanide process. Tons treated, 545 tons of 2000 lbs.; gold recovered, 1545 ounces; total gold recovered, 10,199 ounces."

**LANGLAAGTE ROYAL.**—Johannesburg Consolidated Investment Company (Limited) announce receipt of the following cable from the above company:—"Production for August, 4068 ounces, 105 stamps, 27 days."

**LANGLAAGTE STAR.**—Production for August, by cable:—"Mill. Stamps running, 60; ore crushed, 6240 tons of 2000 lbs.; gold retorted, 808 ounces.—Tailings. Cyanide process. Tons

treated, 3525 tons of 2000 lbs.; gold recovered, 608 ounces. Total gold recovered, 1516 ounces."

**LILLOOET, FRASER RIVER, AND CARIBOO.**—The following cablegram was received from the Chairman:—"Lillicoet property. Contract for wire tramway signed with Messrs. Fraser and Chalmers to be completed in three months. Have returned from the Lardian district; our engineer, Mr. Jamieson reports excellent showing, and that near the surface has opened a large body gray copper. The old Sonoma claim is 2000 feet from the Broadview claim and the vein is increasing in size. Continued improvement reported from the Montgomery camp.—City of Spokane. Manager reports new vein discovered 210 feet south of tunnel, showing for about 500 yards, assay results satisfactory; are now sinking winze and shaft on original vein."

**LUCKY GUSS.**—The following cable has been received from the mine manager, dated September 9:—"Mine is improving. Have struck good ore in the 6th level south." Extract from manager's letter, dated August 27:—"As far as I can determine now, we will have 85 feet of the vein towards the Orpha May. We have the shaft timbered 50 feet, and will now start the levels both ways. In the old workings we are now 400 feet deep, and driving levels both ways. South we have good ore, and a streak 2 feet wide that runs better than 2 ounces. We have been into it now 15 feet, and it still holds good. The mine never looked so well as at present."

**MAY CONSOLIDATED.**—The following cable message, dated Johannesburg, September 4, has been received at the office:—"The yield of gold during the past month (August) was 3557 ounces from 12,150 tons crushed. Mill running 27 days. Cyanide 1851 ounces from 9000 tons. Total for month 5508 ounces."

**MENZIES ALPHA LEASES.**—The following cable has been received from the manager:—"There is a great improvement (in) winze (s). The present width of reef is 2 feet; looks splendid. New incline shaft, same reef, 50 feet (depth); assay value for gold per ton, 7 ounces."

**MENZIES GOLD ESTATES.**—The following cable has come to hand from the mine manager:—"Aurelia, No. 2 shaft, Aspasia line, hanging wall side. We have struck a quartz vein 18 inches wide, assaying 8 ounces 9 dwts. 9 grains per ton. Full report is sent by mail."

**MEYER AND CHARLTON.**—Result of working for August:—"Main reef, 2799 tons crushed; south reef, 5767 tons crushed; leader reef, 936 tons crushed; total, 9502 tons. Gold won, 2873 ounces; extracted from tailings, 1676 ounces; total, 4549 ounces. Profit for month, £4394."

**MIDAS EAST ESTATE.**—According to cable advice from the head office at Johannesburg the reef in this property has been struck in the bore hole at a depth of 639 feet, and in consequence thereof the board has resolved to forthwith put down the main shaft.

**MCKENZIE GOLD MINES.**—Mr. Frank Nicholas, consulting engineer, cables as follows:—"McKenzie-Glenloch. Re-commence crushing September 14. Main shaft is down 140 feet. Expect to reach water level in 12 feet."

**MONASTERY DIAMOND.**—Cable received 9th inst. states:—"297 loads last week yielded 20 carats."

**MONTANA.**—By cablegram from the mine the directors are informed that the total output for August was 6250 tons of ore which contained gold, 2050 ounces, and silver, 11,980 ounces. The estimated realisable value of the same is \$48,400.—Expenditure. Working expenses on revenue account, \$3400. Outlay on developments, \$3100. Outlay on Blue Bird and Hickey Mine, \$1000. Extraneous expenses, including insurance, \$4400. Permanent improvements and machinery, \$300. Total, \$43400. Estimated net result, \$5000.

**MOUNT GREENOCK.**—The subjoined cable information is to hand from the manager:—"The second test bore bottomed 40 feet from surface; core shows 18 inches of cemented wash dirt, together with traces of gold. The third test bore has bottomed 53 feet from surface, showing 1 foot of cemented wash dirt." (By mail advice July 27 the first test bore showed 24 feet of alluvial.)

**MOUNT HEPBURN.**—The following cable has been received from the general manager of the company:—"Have begun work. Hope I shall be able to have sufficient machinery working during next month in order to treat 100 tons of ore weekly. Miller (a director) has returned from the mine most pleased with the appearance."

**MOUNT LYELL.**—The following cable, dated September 1, has been received by this company's London office from its head office at Melbourne:—"From July 31 to August 27 inclusive total amount 2344 tons ore and 129 tons first matte on hand at date; last month's returns have been treated by one furnace, resulting total approximate tonnage 313 tons copper matte, containing copper 147 tons, silver 8065 ounces, gold 481 ounces. Average assay value of ore before treatment copper 6 1/2 per cent.; silver 3 ounces 8 dwts. per ton, gold 4 dwts. per ton. There was not any first matte on hand August 27. Sluice has arranged to re-treat same by close of each of the monthly returns."

**MOUNT MORGAN.**—Results for the month of August:—"Tons chlorinated, 8900; gold returned, 12,487 ounces."

**MOUNT ORIENT.**—The following cable has been received from one of the directors visiting the mine:—"40 tons crushed 145 ounces. The machinery works badly." (This machinery is being replaced.)

**MURCHISON NEW CHUM.**—The following cable has been received from the mine:—"North level has driven in 14 feet. The whole width is composed of slate formation and small quartz veins 2 feet 6 inches, showing specks of visible fine gold."

**MYSOORE GOLD.**—The directors have received a telegram from the mine giving the return of gold for the month of August as follows:—"5300 tons of quartz produced 779 ounces of gold; 4460 tons of tailings produced 1202 ounces of gold; 1760 tons of tailings (cyanide process) produced 15 ounces of gold; total production for the month, 9133 ounces of gold."

**MYSOORE REEFS (Kangundy).**—The directors have received a telegram from the mine, dated September 5, giving last month's return of gold as follows:—"507 tons of stone produced 15 ounces of gold; 20 days milling."

**MYSOORE WEST AND MYSOORE-WYNAAD CONSOLIDATED.**—Tank Block. The manager cables the result of crushings for the month of August as follows:—"After a mill run of 614 hours, 1400 tons, 474 ounces of gold."

**NEW COMET.**—The Anglo-French Exploration Company (Limited), as London agents for the New Comet Gold Mining Company (Limited), have received a cable from Johannesburg to the effect that the crushing for the last month was as follows:—"The number of tons crushed, 5950; the number of ounces recovered from mill, 1778; the number of tons treated by cyanide, 5497; the number of ounces recovered from cyanide, 1264; total number of ounces recovered, 3042, as compared with July, which was as follows:—"The number of tons crushed, 6612; the number of ounces recovered from mill, 1873; the number of tons treated by cyanide, 4573; the number of ounces recovered from cyanide, 616; total number of ounces recovered, 2488."

**NEW ORCESUS.**—Production for August, 65 stamps, 28 days, 2633 ounces.



**NEW CHUM.**—The following cable is to hand from the mining manager:—"Since last report the main shaft has been sunk 8 feet, total from No. 7 plat 17 feet, and from surface 627 feet. Have stopped sinking here for the time being, in order to sink a winze at 110 feet east of shaft in No. 6 level. The reef in the north drive is improving."

**NEW HERIOT.**—Last month's crushing yielded 6024 ounces.

**NEW MIDAS ESTATE AND GOLD.**—Results for August. A cablegram has been received from the head office, Johannesburg, stating the following results for last month:—"Crushed, 2712 tons; obtained from mill, 1017 ounces of gold; obtained from cyanide works from 1260 tons of tailings treated 542 ounces of gold; total, 1559 ounces of gold."

**NEW PRIMROSE.**—The Johannesburg Consolidated Investment Company (Limited) announce receipt of the following cable from the above company:—"Production for August, 10,161 ounces; profit, £8486; 160 stamps, 27 days."

**NEW RIETFOONTEIN ESTATE GOLD.**—The Johannesburg Consolidated Investment Company (Limited) announce receipt of the following cable from the above company:—"Production for August, 2125 ounces, 50 stamps, 25 days."

**NEW ZEALAND CROWN.**—Tonnage mined during the month of August 920 tons, the highest monthly output since the beginning of the year; 200 tons have been added to the reserve at the battery.

**NORTH CRESUS.**—Telegram received from the manager states as follows:—"Crosscut to the east. Samples taken from winzes have assayed 1 ounce 13 dwts. per ton. Winze 100 feet, 89 feet from east shaft. Prospects are decidedly encouraging."

**OCTAGON EXPLORERS.**—Cablegram from Mr. John Reid, C.E., the company's resident director in Coolgardie, states:—"Breen has made a new discovery—a reef 2 feet 6 inches thick, 250 yards, East Tower Hill, lease No. 4387. Have secured 48 acres. Average assay of ore is 3 ounces 17 dwts. 16 grains. Have secured 24 acres more adjoining Tower Hill, lease No. 4387."

**PALMAREJO.**—Return for August. Crushed, 2150 tons; worked 2100 tons, producing \$50,000; expenses, \$34,000.

**PRINCESS ESTATE.**—Result of working for month of August:—"Crushed 4111 tons; won 1394 ounces of gold; extracted from tailings 720 ounces. Total, 2714 ounces."

**ROBINSON GOLD.**—Production for August: By cable. "Mill, 120 stamps at work; 16,082 tons of ore crushed, yielded in melted gold 10,923 ounces; from concentrates (by chlorination), 800 ounces; from tailings (cyanide process), 3042 ounces; from slimes, 1921 ounces; from own ore, 16,686 ounces; from concentrates bought (by chlorination), 4145 ounces; total gold recovered, 20,831 ounces; profit for the month, £35,500."

**ROODEPOORT DEEP LEVEL.**—Result of last month's crushing:—"Battery ran 28 days, crushed 4570 tons, produced 1663 ounces; over plates 3163 tons cyanided, producing 458 ounces concentrates, producing 241 ounces; total production for the month, 2366 ounces."

**ROODEPOORT GOLD.**—The Johannesburg Consolidated Investment Company (Limited) announce receipt of the following cable from the above company:—"Production for August 1432 ounces, 40 stamps, 29 days."

**ROODEPOORT UNITED MAIN REEF.**—Result of operations for August:—"7820 tons crushed produced 3310 ounces; cyanide, 837 ounces; total, 4147 ounces; profit, £4970."

**SOUTH BENDIGO.**—The following cable has been received:—"Since last report the main shaft has been sunk 24 feet; total from plat 222 feet, and from surface 1012 feet. At 1050 feet will open out on the 25 feet reef disclosed in winze."

**SOUTHERN NEW CHUM.**—The London office has received the following:—"Since last report the main shaft has been sunk 12 feet, total from No. 1 plat 187 feet, and from surface 347 feet. Have commenced driving north on the reef (Lawrence) at No. 1 level."

**ST. JOHN DEL REY.**—The following telegram has been received from Mr. Chalmers:—"Produce month of August 24,500 oitavas, equal to 2824 ounces troy, value £9494. Yield per ton 43 oitavas (50 ounces troy)."

**TALISMAN GOLD MINES.**—The following cable has been received by the company from their representative at Perth (Western Australia), dated September 8:—"Shall commence to crush September 10; number of tons of ore on dump 1000; the average value of the ore on the dump, 3 ounces. Ore in eight amounts to 5000 tons. The mine looks exceedingly well."

**TOLIMA.**—The following cablegram has been received from our acting superintendent at the mines:—"August estimated returns (fine silver valued at 2s. 9d. per ounce), £4500; August estimated profit, £800."

**TRANSVAAL COAL TRUST.**—The following cablegram has been received from the head office at Johannesburg, as bearing on the company's operations for the month of August, viz.:—"Output, 33,800 tons; profit, £3100."

**TREASURY.**—Return for the month of August:—"Tons crushed, 6009; yielded 2556 ounces, valued at £8215."

**VAN RYN.**—Production for month of August, by cable:—"Mill worked 25 days, 50 stamps, 3847 tons equals 1086 ounces; concentrates, production for month in ounces, nil; cyanide works, 3900 tons treated, recovered 552 ounces equals 552 ounces; total amount of gold recovered equals 1638 ounces."

**WAIHI GRAND JUNCTION.**—The manager cables September 5:—"Grand Junction engine shaft is down 456 feet; Waihi West prospecting shaft, south drive, 348 feet; great improvement in this drive since last report."

**WEMMER.**—The following cable is just to hand, the result of work done here during August:—"7104 tons crushed, yielding 3508 ounces of gold (29 days); and from cyanide plant 5000 tons treated, yielding 1133 ounces; from concentrates, 174 tons; caught assaying, 100 dwts. (5 ounces)."

**WESTERN ANDES.**—Advice, dated July 19, by which it appears that the produce of the mines during June failed to reach the expenditure by about £200, owing to the continued drought preventing the stamps being kept fully at work.

**WOLHUTER.**—Result of operations for August:—"100 stamps crushed 13,603 tons; produced 4472 ounces; cyanide, 2168 ounces. Total, 6640 ounces."

**WORCESTER EXPLORATION.**—The following cablegram has been received from South Africa:—"The result of last month's crushing yielded 2476 ounces of gold."

**NEW ELKHORN MINING COMPANY (LIMITED).**—The directors have declared an interim dividend on the priority shares of 1s. per share, free of income-tax, payable on the 30th inst. to all shareholders registered on the company's books on August 31. The directors regret that the strike of miners and labourers at Leadville, which commenced on June 20 last, is still in operation, thereby necessitating a complete shut down of all operations on the company's properties since that date. Any decisive information received will be at once communicated to the shareholders.

We are informed that the Leicester Consolidated Diamond Mines (Limited) has just received a further shipment of diamonds of 724 carats, valued at £1600, comprised of extra white stones, of even finer quality than previous shipments, including several good stones of between 15 and 25 carats each.

AFRICAN MINES' AUGUST OUTPUT.

	GOLD.					
	Mar. Ozs.	Apr. Ozs.	May. Ozs.	June. Ozs.	July. Ozs.	Aug. Ozs.
Appantoo .....	—	—	376	226	117	—
Barrett .....	533	400	500	503	650	625
Block B .....	2,870	3,153	2,854	2,511	3,075	3,278
Bonanza .....	—	—	—	—	—	3,503
Buffelsdoorn .....	2,202	—	—	—	—	—
Champ d'Or .....	2,920	3,360	3,383	3,074	2,969	—
City and Suburban .....	8,203	7,835	8,351	8,296	9,094	10,794
Crown Reef .....	11,303	11,498	11,369	10,723	11,011	11,867
Durban-Rodepoort .....	5,558	5,590	5,519	5,604	5,704	5,740
Rustleigh .....	2,100	2,155	1,650	1,850	1,750	—
Perreia .....	12,770	12,219	13,115	13,418	13,601	13,600
Forbes Reef .....	150	102	67	—	115	127
Graskop .....	310	222	204	180	236	161
Geldenhuis Deep .....	3,684	4,046	4,173	4,031	5,180	5,210
Geldenhuis Estate .....	6,204	6,139	5,897	6,889	7,319	6,368
Geldenhuis Main Reef .....	1,881	1,655	1,214	1,589	1,495	1,441
George Goch .....	3,383	4,362	4,660	3,740	3,708	3,831
Ginsberg .....	938	1,175	1,018	1,015	1,084	1,112
Glencairn Main Reef .....	4,246	4,527	3,230	3,468	3,824	3,389
Henry Nourse .....	6,166	6,223	6,298	6,649	6,904	6,784
Joe's Reef United .....	175	227	294	227	219	248
Johannesburg Pioneer .....	2,621	2,613	2,810	2,826	3,064	3,149
Jubilee .....	2,323	2,485	3,059	2,502	2,812	2,951
Jampers .....	8,704	4,202	4,935	4,077	4,960	4,854
Langlaagte Estate .....	9,568	9,002	9,428	9,131	9,253	10,199
Langlaagte Royal .....	—	—	3,182	3,704	4,304	4,068
Langlaagte Star .....	—	—	1,207	1,491	1,816	1,516
Liabon-Berlyn .....	812	763	737	655	785	1,185
Lydenburg Ming Estate .....	4,945	5,404	6,153	5,770	4,941	2,544
May Consolidated .....	3,871	4,323	4,878	5,204	4,741	—
Meyer and Charlton .....	3,457	4,006	3,979	4,109	4,249	4,519
Minerva .....	—	—	1,379	1,453	1,856	—
Moodies .....	1,150	1,761	690	940	—	—
New Chimes .....	1,692	1,764	1,746	1,825	2,319	—
New Comer .....	233	—	—	—	2,488	3,042
New Cressus .....	2,724	2,441	2,772	2,454	2,577	2,633
New Heriot .....	6,045	6,011	6,033	6,014	5,961	6,024
New Midas .....	—	—	—	—	731	1,559
New Modderfontein .....	—	—	2,172	2,778	3,150	—
New Primrose .....	9,105	9,547	9,004	9,786	10,752	10,161
New Rietfontein .....	2,319	2,327	2,117	2,150	1,721	2,125
Nigel .....	1,798	2,001	2,026	2,274	1,990	1,850
Orion .....	—	—	897	—	—	—
Prem. Tati Monarch Reef .....	—	—	—	368	—	—
Princess Estate .....	1,537	1,671	2,072	2,274	2,432	2,714
Robinson .....	16,267	15,927	19,333	20,343	20,612	20,831
Rodepoort Deep .....	—	1,263	2,171	1,927	1,881	2,366
Rodepoort Gold .....	—	—	—	1,214	1,358	1,452
Rodepoort United M.R. .....	4,001	3,951	4,121	3,919	4,067	4,147
Salisbury .....	2,450	2,850	2,950	2,400	2,400	—
Sheba .....	12,500	10,340	10,024	8,589	8,100	8,005
Simmer and Jack .....	8,636	8,640	8,653	8,816	8,855	—
Spitzkop .....	286	—	—	—	85	—
Stanhope .....	870	960	920	1,100	1,100	1,030
Sutherland Reef .....	378	134	—	—	—	—
Tati Blue Jacket .....	—	—	—	328	—	—
Transvaal Gold .....	4,945	—	—	—	—	—
Treasury .....	—	—	2,373	2,312	2,584	2,566
United Ivy Reef .....	590	619	570	700	685	—
United Langlaagte .....	367	—	—	—	—	—
Van Ryn .....	2,088	1,585	1,551	1,635	1,626	1,638
Vassau .....	—	—	315	388	626	—
Wemmer .....	5,202	5,597	5,148	4,636	4,891	4,511
Wolhuter .....	5,524	4,778	5,043	5,884	6,135	6,440
Worcester Exploration .....	2,453	2,444	2,444	2,819	2,431	2,476
DIAMONDS.						
Carats. Carats. Carats. Carats. Carats. Carats.	4,500	4,750	3,700	4,150	4,400	5,050
COAL.						
Tons. Tons. Tons. Tons. Tons. Tons.	25,017	26,500	18,500	24,000	27,000	28,738
Cassal Coal .....	16,100	16,500	13,200	16,600	20,000	19,500
Great Eastern .....	29,400	32,200	—	27,800	33,000	33,800

THE JOKER (YALGOO) GOLD MINES (LIMITED).

The following circular has been sent to the shareholders:—"So many enquiries have been received from shareholders as to when a trial crushing may be expected from the mine that your directors think it desirable to place before you the position of affairs. It was the original intention of the board to put through a trial crushing of some 100 tons of ore at a public battery, with a view to demonstrating the value of this undoubtedly rich mine, but the company's agents advise that there are only two batteries at all accessible. One is of so old a type and in such a dilapidated condition, that in all probability not more than one-third of the assay value of the ore would be obtained, besides which we should have to pay 30s. per ton for crushing, and cost of cartage extra. The other battery is 26 miles distant from our mine, and the cartage alone would cost no less than £5 10s. per ton beyond the charge for crushing. Your directors have, therefore, abandoned the idea of crushing at a public battery, as, by the same mail which brought the above information, they learn that our own machinery ordered for the company's use has now arrived at the mine, and a representative from the manufacturers is on the spot to superintend its erection. Owing to the forward state of the preliminary arrangements for the mill site, buildings, &c., your directors hope in about two months' time to see our own plant completed and at work. In the meantime, the developments are being pushed on most vigorously, as shown by the fortnightly reports received from the mine manager, which have been inserted in the financial papers for the information of shareholders. Your directors feel that the anticipations which have been held out with regard to this property will be fully realised, and that the shareholders may look forward to finding themselves associated with one of the most promising undertakings in Western Australia."

NEWHOUSE TUNNEL.

A circular to the shareholders states that:—"During the month of July the tunnel was driven 130 feet, but owing to floods which occurred about the middle of that month, part of the railway which carries the coal used at the tunnel was washed away; consequently we were without coal, and we are now advised that, so far as driving goes, work was discontinued for a month, though the time was very usefully employed in other necessary work. Driving was recommenced on the 24th ult."

The London agents of the RANDFONTEIN ESTATES GOLD MINING COMPANY, WITWATERSRAND, LIMITED (the Robinson South African Banking Company, Limited), have received cable advice of the dispatch, by mail, from Johannesburg, of the bonus share certificates of the Porgera Randfontein Gold Mining Company (Limited). The certificates will probably be received in London at the end of this month, and will be forwarded by the London agents to the shareholders without delay.

The HAURAKI GOLD MINING COMPANY have declared a dividend of 1s. per share, payable on 29th inst.

NEW ISSUES.

NEW OPTIONS COMPANY.

The share capital of the New Options Company (Limited) is £50,000, in £1 shares, of which 40,000 will be issued fully-paid to the vendors as purchase consideration, and the balance is now offered for subscription. The prospectus states that the company has been formed to take over the assets of the New Options Syndicate, Limited (in liquidation), except its uncalled capital, cash and gold in hand; to provide additional working capital for the development of the syndicate's mining property—the Monarch Gold Mine, 60 acres in extent, and adjoining property, in the Beechworth district of Victoria, and to carry out its objects on an enlarged scale. With regard to development, it is stated that crushing returns show that 20 tons from the outcrop yielded 6½ ounces of gold to the ton, and 20 tons from the Monarch Mine produced 385 ounces, the most recent result being 27 ounces from 13 tons. It is added that the district possesses great natural facilities for economical mining, and the working capital to be provided is for extensive development and should the anticipated favourable results accrue, it is intended to resell the property to a larger company. Since the date of the prospectus, a cablegram has been received from Mr. Davey, dated September 7, notifying that as a result of a further crushing of 13 tons of ore, 27 ounces of gold were obtained, and that the shaft has reached a depth of 60 feet, the lode being 8 feet wide, of the estimated value of 10 dwts.

NORTH STAR GOLD MINES (LIMITED).

With a capital of £125,000, in £1 shares, this company has been formed to acquire and work gold mining leases Nos. 528, 529, 3213, 4069, 4165, 4245, which with a machinery site of 5 acres comprise a total area of 113 acres, together with the battery and machinery now on the mine. The property is situated about 6 miles south-east of Mount Malcolm in the Mount Margaret district of the North Coolgardie gold field, Western Australia, and has been reported on by Bewick, Morsing and Co., Jas. Linn Sherlaw, W. Adams, jun., M.E., M.A.I.M.E., J. Read-Roberts, David Lindsay, F.R.G.S. (report to the directors). A reference to their reports shows that with respect to:—Developments: Five shafts varying in depth from 24 feet to 70 feet have been sunk on the property together with several costeanes.—Reefs: There are four distinct lines of reef traversing the property with gold well distributed.—Yield: The value of the ore varies from 2 ounces to over 4 ounces per ton.—Cost of Production: This is estimated at £1 15s. per ton.—Water: Besides an inexhaustible supply of salt water close at hand, there is a fine supply of fresh water on the property.—Timber: Mining timber ample. Fuel plentiful.—Machinery: The vendors having acquired the property, and carried out a considerable amount of development work for some months past, were advised that the results justified the immediate erection of machinery.

MOUNT YAGAHONG GOLD MINING AND EXPLORATION (LIMITED).

On Thursday last Major F. Heritage presided at Winchester House at the statutory meeting of this company. He said that at the time when the company was brought out, things were in a state of very considerable depression in the mining world, and many companies which were floated had but a very poor response from the public. That, however, was not the case with this company. They were advised that a clear capital of £10,000 would be sufficient to enable them to proceed and bring the company into a dividend-paying condition. The directors, therefore, had it in view that if a sufficient amount were not subscribed, they would not go to allotment. He was glad to say that after the vendors' claim had been satisfied, there remained £10,000 for working capital, and they had no reason to suppose that it would not be sufficient for all purposes. After explaining that an arrangement had been arrived at for placing shares in Paris, he pointed out that the property consisted of three different leases. Development had not proved very satisfactory in the Extended Block, but in the Ethel May a lode had been struck which was suspended, but not proved at the time when they took over the property. The owners of an adjoining property, called the Pelican, had also sunk a shaft near the boundary of the Yagahong leases, and they had struck a rich lode of ore which, in the ordinary course of things, must run through the company's property. They had, therefore, had communication with the object of buying the adjoining lease, but up to the present satisfactory terms had not been arranged. Mr. Willis, who had charge of the property before the company took it over, had been engaged as manager, and from his recent reports it appeared that there was an abundance of good water, and so far many of the developments had proved very satisfactory. The directors were in negotiation now for sending out machinery to the mine.—Mr. Cuthbertson, who had inspected the mine, afterwards addressed the meeting, and spoke very hopefully of its prospects.

COMPANIES AND LEGAL ANNOUNCEMENTS.

\* Advertisements are inserted in this column at the rate of 9d. per line, with a minimum charge of 7s. 6d.

THE HAURAKI GOLD MINING COMPANY (LIMITED).

NOTICE IS HEREBY GIVEN, that a DIVIDEND of 1s. per Share, free of Income Tax, will be PAID on and after the 29th day of September, 1896.

Holders of Share Warrants must lodge Coupon, Serial No. 6, at the office of the Credit Lyonnais, Paris, or at the Company's Offices, 97, Dashwood House, New Broad Street, London, E.C., three clear days for examination.

W. J. LAVINGTON, Secretary.  
London, 8th September, 1896.

THE BRILLIANT GOLD MINING COMPANY (LIMITED).

CHARTERS TOWERS, QUEENSLAND.

LONDON REGISTER.

NOTICE IS HEREBY GIVEN, that a BRANCH REGISTER of SHARES for the United Kingdom has been Established by the Brilliant Gold Mining Company (Limited), of Charters Towers, Queensland, and is NOW OPEN and kept at the London Offices, situated at Blomfield House, London Wall, E.C.

No Shares can be entered on the London Register unless and until the Certificates have been marked for transfer to that Register, for which purpose they must be first lodged at the chief office of the Company at Charters Towers.

ARTHUR GIFFARD, Acting London Secretary.  
Dated the 10th day of September, 1896.

LANGLAAGTE ROYAL GOLD MINING COMPANY (LIMITED).

NOTICE IS HEREBY GIVEN, that the GENERAL MEETING of this Company will be held at Johannesburg on the 13th October, 1896.

Transfer Books will be closed from the 22nd September to the 13th October, both days inclusive.

By Order,  
Johannesburg Consolidated Investment Company (Limited),  
T. HONEY, London Secretary.  
7, Lothbury, E.C., 11th September, 1896.



**L. LePersonne and Co., London.**

Telephone, No. 15,144. Telegraphic Address: "LePersonne, London."

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REPORTING ON MINES FOR HOME MARKET, &c.

First-class London references.

Bankers—The UNION BANK OF AUSTRALASIA, Coolgardie.

Cable Code—"ALLSMITH, Coolgardie, West Australia."

Cable Address—"ALLSMITH, Coolgardie, West Australia."

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mation, on application, personally or by letter.NOTE.—Entrance Examination for Intending Associates will be  
held on TUESDAY, 6th OCTOBER. Subjects: Mathematics and  
Elementary Practical Geometry.G. T. PLUNKETT, Lieutenant-Colonel (late R.E.),  
Director S. and A. Institutions,  
R.C.Sc.I., Stephen's Green, Dublin.The directors of the ALADDIN'S LAMP GOLD MINING COM-  
PANY (LIMITED) have declared a further interim dividend of  
2s. per share, free of income tax, payable on September 25.  
The transfer books will be closed from September 14 to 25  
inclusive.**The Mining Journal,  
RAILWAY & COMMERCIAL GAZETTE.**

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THE BUSINESS MANAGER) can now be received for the forthcoming issue  
of THE MINING JOURNAL, RAILWAY AND COMMERCIAL  
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at 3, DORSET BUILDINGS, SALISBURY SQUARE, E.C., up till 9 p.m.REPRESENTATIVE IN  
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Codes used: "A.B.C.," "Moreing," and "Universal."**CONTENTS**Of this Number of "The Mining Journal, Railway and  
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LONDON: SEPTEMBER 12, 1896.

**ANNUAL REPORT ON MINING IN  
VICTORIA.**WE have quite recently laid before our readers an account  
of the annual reports of the respective Departments of  
Mines of Queensland and New South Wales, and have  
now the pleasure of inviting their attention to a summary of  
the Victorian report for the year 1895. Unlike the other  
colonies, Victoria is, as far as mining is concerned, almost  
exclusively a gold mining region. Thus in the year in question  
the total value of all the minerals produced is returned  
as £3,083,324, out of which gold is accountable for  
a total of £2,900,344, leaving as the value of all the other  
minerals only £122,980, or (say) some 4 per cent. of the  
total. Of this latter figure, nearly the whole is the result  
of coal mining; the production of coal was about 196,000 tons,  
valued at £119,418, so that but little is left for the other  
minerals. Of these others, it need only be said that tin ore  
is showing a well-marked improvement, although the output of  
this, the earliest tin-producing colony of Australia, is really  
insignificant. The coal production is growing very rapidly  
and very healthfully. The year's output, small though it is,  
is only equal to that of one very moderate sized colliery in this  
country, is, nevertheless, more than one-half of all that had  
been raised in the colony before the beginning of 1895, so that  
the advance is a decidedly rapid one. There is, accordingly,  
every indication that the coal production of Victoria will before  
very many more years rise to be a factor of some importance in  
the mineral output.



The gold production is given as 740,086 ounces, being an increase of 69,406 ounces over the output of 1894, and the largest recorded since 1884, so that the recent improvement in gold mining is apparently well maintained. It seems, however, that the Department of Mines has this year made an effort to obtain greater accuracy in this figure than heretofore. It is, of course, well known that figures can be made to prove anything, and whilst all statistics are unreliable, mineral statistics would seem to have an unenviable notoriety for inexactitude. It is not, perhaps, too much to say that there are no such things in any country—our own not excluded—as correct mineral statistics, and the gold returns of the various Australasian colonies are quite as bad as those of other nations, if not rather worse. It must not be supposed that Victoria is any worse than her sister colonies, although she seems the first to honestly acknowledge her shortcomings.

Gold statistics have been obtained here, as in the other colonies, by means of returns from the local authorities on the various gold fields, these being the Mining Registrars in this particular instance. The Registrars are not furnished with any legal authority, as we venture to think they should be, to collect these statistics, but have to depend on the voluntary statements of producers and buyers, and more especially on the local branches of the various banks. In addition to this, the registrars are not statisticians; it is very doubtful whether any of them have studied this science, and it is quite certain that such knowledge is not taken into consideration in determining their fitness for the post, which demands, indeed, qualifications of a very different order. The result is, however, that they do not probably make the best use of the material which they accumulate, and defective returns are the inevitable result. Besides the Registrars' returns there is another method which can be employed for determining the gold output, and that is by the Mint returns. The bulk of the gold goes to the Melbourne Mint, and a very small amount to the Sydney Mint, there being also a certain amount in the hands of the various banks. By adding or subtracting the increase or decrease, as the case may be, of the stocks thus held, the total year's production may be arrived at, it being taken for granted that none of the gold finds its way out of the country except through the Mints. There seems to be no reason why gold should all pass through the Mint, except that this is the readiest and most rapid way of realising upon it. In any case, however, it is difficult to see how the output thus arrived at can be in excess of the actual output; if anything, it may be expected to be below it. The following figures show the comparison between the output as arrived at by these two methods for the last two years:—

	1894. Ozs.	1895. Ozs.
Calculated from Mint returns .....	716,955	740,086
" " Registrars' returns ..	673,680	693,837
Difference .....	43,275	46,249

It will be noted that the difference is, roughly speaking, proportional to the total; and, furthermore, that both methods of calculation show a substantial increase in output for 1895—the increase, according to the Mint returns, being 23,131 ounces and 20,167 ounces, according to the Registrars' returns. If, however, the newly-introduced method is, as seems upon the whole probable, the correct one, and if the annual output has for some 40 years been undervalued in the proportion which the above table seems to indicate, the grand total of the production of Victorian gold, which is here given as just over 60,000,000 ounces, ought to be some 64,000,000 ounces. This correction has not, however, been applied, although it would seem but right that such a serious error having been discovered, the older statistics should be revised in accordance with the corrected data.

With regard to the richness of the quartz crushed, crushings are reported to have produced 368,035 ounces of gold; there is, however, a discrepancy in the statements as to the amount of quartz that was crushed for this yield, this amount being stated in the body of the report as 855,738 tons, making the average yield 8 dwts. 14 grains per ton, whilst in the statistical tables the quantity is given as 875,738 tons, and the yield as 8 dwts. 7 grains. We have, naturally, no means of deciding which of these figures is the correct one. The total number of men employed in gold mining during 1895 is given as 29,897, of which number 15,476 were engaged in quartz mining, and the remainder in alluvial. The amounts of gold produced from these respective sources is set down as 413,934 ounces and 279,003 ounces respectively.

The collection and publication of the above statistics is one of the main functions of the Department of Mines, and a most important one. We are, however, very glad to see that other duties are not being neglected, as witness the following quotation from the opening pages of the report:—"While the advantage to the mining industry which would inevitably accrue from the introduction of English capital to assist in developing the known auriferous leads and lodes of the colony has been kept prominently in view, it has at the same time been fully recognised that incalculable injury, rather than benefit, must result from the investment of such capital in anything but legitimate ventures; it has also been recognised that it was clearly the duty of the Mining Department to discountenance by every means in its power the fostering of the English capitalist, for speculative purposes only, worthless mining properties. With this object, carefully prepared reports, accompanied by the necessary plans, giving full and reliable information in regard to the proved auriferous leads and lodes of the colony, have been sent home at regular intervals to the Agent-General to be made available to the investing public."

This passage is too important not to be quoted in full, and we have italicised the leading sentence in it. This is assuredly a step in the right direction at last, and we only hope that the Mining Department, having thus discovered its duties, will take care to perform them in a thoroughly efficient manner. It would surely be an easy matter to arrange a code so that in-

tending investors could, on application to the Agent-General, have a telegram sent out and receive an official cable reply as to the value or worthlessness, as far as known to the Mining Department, of any particular property. No sane investor would grudge the payment of a reasonable fee for such an official telegraphic report, or, if he did, it would certainly serve him right if he were victimised, as he would deserve to be. At the same time, the mere knowledge that such a system were in existence would suffice to warn off operators in the colonies who look upon the London market as the dumping ground for their worthless properties. We cannot too strongly commend the Victorian Mining Department for the steps they are taking, and we hope that they will see their way to supplement these as we have suggested.

Another excellent piece of work is the erection of a testing plant with all the most approved modern plant for the treatment of gold ores at the Bairnsdale School of Mines. Such a plant is not only an invaluable educational weapon, but is bound to have a great practical effect upon the progress of metallurgical science in the whole colony. Victoria is at last waking up, and instead of being the most backward of the great gold producing centres it will at no very distant date, at this rate, take its proper place in the march of technical progress, if it does not indeed manage to lead the way. It is to be devoutly wished that our Home Government could see its way to furnish the London School of Mines with a similar complete equipment for the study of practical metallurgy. In that case we should, perhaps, not have the mortification of seeing that, when our Australasian colonies require expert metallurgical advice—as witness Broken Hill and Mount Lyell—they are compelled to seek for it in Germany and in America, and there might be some chance of our regaining the position which Great Britain once held as the foremost metallurgical country of the world.

## MARKS AND COMMERCE.

THE London Chamber of Commerce has always been of two minds with reference to the Merchandise Marks Act. In this it fairly represents the country at large. Other Chambers generally go wholly for or against the Act. The shipping interest has a strong representation on the Metropolitan Chamber, and it is an open secret that its powerful influence recently prevented some valuable suggestions for the amendment and administration of the Act affecting other trade interests from taking practical shape. The administration of the Act by the Customs has given the shipping trade some cause to complain of the burdens imposed on import trade, and as some compensation the trade has been desirous of taking advantage of the increased business the Act is bringing by reason of the laxity of the Board of Trade in putting into operation those provisions of the Act which affect goods after they have arrived in this country. It is notorious that a large business is growing up of importing foreign goods, unmarked, into this country in order that they may be marked with English marks and then exported as English goods. In this way, London is again becoming, as it was, the emporium of the world's market. The friction in the shipping trade, which the stringent enforcement of the Act by the Customs caused, is being avoided by bringing goods into this country, unmarked, for the Act only affects goods which bear marks. Once in this country the goods have English marks affixed, owing to the two minds which exist in the London Chamber of Commerce. The Board of Trade, upon whom the Act imposes the duty of seeing to its being enforced as to goods after they have passed into the country, allows these marks to be affixed with practical impunity. In this way goods which have been imported are marked and are either disposed of in the country or are exported as English goods bearing not only the misleading English mark, but the verification of the English export. In this way the shipping trade is again swelling, and it would be more, perhaps, than human to expect of it such a self-denying ordinance as would be involved in refusing to reap a profit arising from an increase of trade, although the benefit is made at the expense of producers within the kingdom.

As long ago as December, 1893, the London Chamber of Commerce was stirred by the fact that in this way the white lead and paint industries in this country were being seriously affected. A circular was then issued calling the attention of wholesale and retail dealers in white lead to the frauds being perpetrated, and to the fact that admixtures of foreign and English white lead were being sold and warranted as "genuine English white lead." In that circular care was taken to draw attention to the provisions of the Act, and the severe nature of the penalties imposed for their infringement. That the Chamber should have expected, in the absence of a consistent enforcement of its provisions by the Board of Trade, that such a notice was likely to prove of serious use, is scarcely probable. However, a further circular has just been issued. In it the secretary—Mr. KENNEDY MURRAY—again calls special attention to his previous pronouncement. He further announces that a "Special Guarantee Fund has been formed by the White Lead Trade for the purpose of undertaking, through the Board of Trade or otherwise, actions against offenders under the above-mentioned Acts, in order to prevent further injury to the White Lead Trade, in consequence of the practice referred to." The fund already amounts to upwards of £5000, and this, we understand, is likely to be considerably increased. It is high time that the country should make up its mind whether it will have the Merchandise Marks Act or not. To enforce it in one place or occasion and not in another is not good policy. Let us either have no Act at all, or let it be enforced not merely at the Customs, or in this or that trade, but consistently and impartially by a responsible Government or other official, whose duty it shall be to see that our home trades do not suffer by provisions of an Act which was passed in the interest of honest commercial dealing.

## BROKEN HILL PROPRIETARY.

TO those who hold a high opinion of the future of the Broken Hill Proprietary Company, the half-yearly report presented at the meeting in Melbourne, and a copy of which we have received by this week's mail, should give ample encouragement. Now that the treatment of the sulphides is a problem likely to be successfully solved, the prospects of this colossal concern are almost incomputable, and are certainly of the rosiest description. During the past 12 months we have had occasion for dealing so much with the position of this company that it is difficult to find anything new to say. In the short space of six months any considerable improvement and progress cannot be expected, and, therefore, the report before us tells us little beyond what we already knew. The significant fact is that the improvement is in the right direction, and that progress is making slow, but sure, guides to ultimate prosperity. The last half-yearly report dealt much with the damage done by the late fire, and the considerable expenditure it incurred, but in the present document the subject is dismissed in a few words. The paragraph in reference to it says:—"It is a source of satisfaction to your directors to be able to state that at the moment there does not appear to be any necessity for anticipating further trouble and expense in connection with the fire in Block 11, and that expenditure during the period under review has amounted to only £2943 6s. 4d. Present indications tend to the belief that any existing combustion has been successfully confined within a limited area, and will not materially retard or interfere with the work in the vicinity." This is most encouraging, and bids fair to be the last word we shall hear on this unfortunate calamity. As regards the quantity of ore in sight, we learn no more than was contained in the circular issued on June 5, and upon which we commented at some length. This circular, it will be remembered, stated that the available quantity of oxidised ore, approximately averaging 15 ounces silver and 12 per cent. lead, was calculated at about 1,250,000 tons, a considerable increase on previous figures. An estimate of the extent and quantity of the known and proved bodies of sulphides from the northern boundary to Jamieson shaft to the No. 4 level, and thence to the southern boundary to the No. 5 level, was given as 2,019,000 tons, assaying on an average 18.5 ounces silver, 24.3 per cent. lead, and 21.9 per cent. zinc. A further quantity of 600,000 ton, is considered to be within those limits, but its extent has not yet been fully determined by the present prospecting operations. The same circular announced a possible reduction in the output, and of the intention of the directors to erect an extensive concentration plant of not less than 5000 tons weekly capacity, on lines which experience of the past few years has proved to be the most efficient, in order to obtain a suitable product from the sulphides for smelting in conjunction with the remaining oxidised ores. We now learn that the necessary plans, which provide for an enlargement up to 10,000 tons have been prepared, and the work of erection will shortly commence, and should be completed before the end of the year. Meanwhile, it is not intended to interfere with the present reduction plants, or with the ordinary course of operations either at the mine or at Port Pirie. Such evidence as all this cannot but give hopes of a prosperous future, which is further assured by the fact that, now that the fire is no longer an obstacle, the exploratory or prospecting work has, during the six months, been prosecuted vigorously, and on a larger scale than at any previous period. The expenditure, we are told, has been heavy, but the results are gratifying, and it is intended to push on the work until a proper estimate can be made of the extent and value of the great bodies of sulphides which underlie the present workings.

## GOLD ESTATES OF AUSTRALIA.

THE directors of the Gold Estates of Australia (Limited) have just issued to their shareholders a circular, from which the latter are likely to derive considerable encouragement, and on the statements contained therein to build high hopes of future prosperity. The circular is of a nature which merits attention at our hands, and though we are, to some extent, pleased with it, and are led to form a somewhat favourable opinion of the company's future, we would counsel shareholders and the public not to be carried away by any exaggerated idea of what is likely to happen as a result of further development. From a long experience of circulars of a similar character, we naturally read them with more calmness and critical judgment than the average investor, for it is a common thing for results to belie the expectations which directors have encouraged shareholders to form. We do not wish it to be inferred that anything of this kind will happen to the Gold Estates of Australia, but it is within the regions of possibility, and should, therefore, conduce to restrain any feeling of enthusiasm which might follow the reading of this glowing circular. The directors first touch upon the Union Jack lease, at Hannan's, which the company has acquired jointly with the Octagon Explorers (Limited). We are informed that in this lease an important ore body has been developed, and that at a depth of 113 feet the lode is 3 feet 6 inches wide, giving assays of 2 ounces of gold per ton on the hanging wall side, and 16 dwts. across the rest of its width, "the gold contents of the lode showing a great improvement in its value upon the upper level." The manager reports:—"It is a well-defined lode, and has a most promising appearance, its composition being similar to that of the rich lodes in this district," whilst Mr. ROBERT GIBSON, M.E., is of opinion that the mine will develop into a fine property. As we have already said, nothing could be more encouraging, and it is to be hoped no pinching out will occur, and thus cause grievous disappointment to the expectant shareholders. We are not aware who Mr. ROBERT GIBSON is, and, therefore, cannot estimate the value of his opinion. We note that he puts after his name the initials M.E.,











# "THE MINING JOURNAL" SHARE LIST.

ABBREVIATIONS AND REFERENCES.—The following are the significations of the abbreviations and references which occur in the Share List:—A, Antimony; Ar, Arsenic; B, Blende; Bz, Borax; C, Copper; D, Diamond; G, Gold; I, Iron; L, Lead; M, Manganese; N, Nitrate; P, Phosphate; Q, Quicksilver; R, Ruby; S, Silver; S/L, Silver-lead; Sul, Sulphur; T, Tin; Zn, Zinc. \* in the "Amount of Share" column of British Mines signifies that the mine is conducted on "Cost Book" principles; in the "Head Office" column of African Mines signifies that the address given is not that of the head office but of a sub, or transfer office; and 1, following the name of African Mines, signifies that they are subject to the Limited Liability Law of the South African Republic.

\* The following is by far the most complete and comprehensive list of mines, in whose shares business is being currently transacted, published. Additions will be made from time to time as occasion requires. Every effort is made to ensure accuracy, and Secretaries of Companies, Share Dealers, and our readers generally, are cordially invited to co-operate with us to this end, by notifying us of any errors that may at any time occur. We desire it to be understood that while our Share List will almost invariably be found correct, we do not hold ourselves responsible for any loss or inconvenience that may arise from possible inaccuracies.

## AFRICAN MINES.

Name.	Closing Price, Sept. 11, 1896.	Closing Price, Sept. 4, 1896.	Am't. of Share.	When last X'd and Dividend.	Called up Per Share.	Amount of Stock or No. of Shares Issued.	Situation of Mine.	Head Office.
Abbott's Con. Reefs	6/ 7/ 10/ 11/ 12/ 13/ 14/ 15/ 16/ 17/ 18/ 19/ 20/ 21/ 22/ 23/ 24/ 25/ 26/ 27/ 28/ 29/ 30/ 31/ 32/ 33/ 34/ 35/ 36/ 37/ 38/ 39/ 40/ 41/ 42/ 43/ 44/ 45/ 46/ 47/ 48/ 49/ 50/ 51/ 52/ 53/ 54/ 55/ 56/ 57/ 58/ 59/ 60/ 61/ 62/ 63/ 64/ 65/ 66/ 67/ 68/ 69/ 70/ 71/ 72/ 73/ 74/ 75/ 76/ 77/ 78/ 79/ 80/ 81/ 82/ 83/ 84/ 85/ 86/ 87/ 88/ 89/ 90/ 91/ 92/ 93/ 94/ 95/ 96/ 97/ 98/ 99/ 100/ 101/ 102/ 103/ 104/ 105/ 106/ 107/ 108/ 109/ 110/ 111/ 112/ 113/ 114/ 115/ 116/ 117/ 118/ 119/ 120/ 121/ 122/ 123/ 124/ 125/ 126/ 127/ 128/ 129/ 130/ 131/ 132/ 133/ 134/ 135/ 136/ 137/ 138/ 139/ 140/ 141/ 142/ 143/ 144/ 145/ 146/ 147/ 148/ 149/ 150/ 151/ 152/ 153/ 154/ 155/ 156/ 157/ 158/ 159/ 160/ 161/ 162/ 163/ 164/ 165/ 166/ 167/ 168/ 169/ 170/ 171/ 172/ 173/ 174/ 175/ 176/ 177/ 178/ 179/ 180/ 181/ 182/ 183/ 184/ 185/ 186/ 187/ 188/ 189/ 190/ 191/ 192/ 193/ 194/ 195/ 196/ 197/ 198/ 199/ 200/ 201/ 202/ 203/ 204/ 205/ 206/ 207/ 208/ 209/ 210/ 211/ 212/ 213/ 214/ 215/ 216/ 217/ 218/ 219/ 220/ 221/ 222/ 223/ 224/ 225/ 226/ 227/ 228/ 229/ 230/ 231/ 232/ 233/ 234/ 235/ 236/ 237/ 238/ 239/ 240/ 241/ 242/ 243/ 244/ 245/ 246/ 247/ 248/ 249/ 250/ 251/ 252/ 253/ 254/ 255/ 256/ 257/ 258/ 259/ 260/ 261/ 262/ 263/ 264/ 265/ 266/ 267/ 268/ 269/ 270/ 271/ 272/ 273/ 274/ 275/ 276/ 277/ 278/ 279/ 280/ 281/ 282/ 283/ 284/ 285/ 286/ 287/ 288/ 289/ 290/ 291/ 292/ 293/ 294/ 295/ 296/ 297/ 298/ 299/ 300/ 301/ 302/ 303/ 304/ 305/ 306/ 307/ 308/ 309/ 310/ 311/ 312/ 313/ 314/ 315/ 316/ 317/ 318/ 319/ 320/ 321/ 322/ 323/ 324/ 325/ 326/ 327/ 328/ 329/ 330/ 331/ 332/ 333/ 334/ 335/ 336/ 337/ 338/ 339/ 340/ 341/ 342/ 343/ 344/ 345/ 346/ 347/ 348/ 349/ 350/ 351/ 352/ 353/ 354/ 355/ 356/ 357/ 358/ 359/ 360/ 361/ 362/ 363/ 364/ 365/ 366/ 367/ 368/ 369/ 370/ 371/ 372/ 373/ 374/ 375/ 376/ 377/ 378/ 379/ 380/ 381/ 382/ 383/ 384/ 385/ 386/ 387/ 388/ 389/ 390/ 391/ 392/ 393/ 394/ 395/ 396/ 397/ 398/ 399/ 400/ 401/ 402/ 403/ 404/ 405/ 406/ 407/ 408/ 409/ 410/ 411/ 412/ 413/ 414/ 415/ 416/ 417/ 418/ 419/ 420/ 421/ 422/ 423/ 424/ 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625/ 626/ 627/ 628/ 629/ 630/ 631/ 632/ 633/ 634/ 635/ 636/ 637/ 638/ 639/ 640/ 641/ 642/ 643/ 644/ 645/ 646/ 647/ 648/ 649/ 650/ 651/ 652/ 653/ 654/ 655/ 656/ 657/ 658/ 659/ 660/ 661/ 662/ 663/ 664/ 665/ 666/ 667/ 668/ 669/ 670/ 671/ 672/ 673/ 674/ 675/ 676/ 677/ 678/ 679/ 680/ 681/ 682/ 683/ 684/ 685/ 686/ 687/ 688/ 689/ 690/ 691/ 692/ 693/ 694/ 695/ 696/ 697/ 698/ 699/ 700/ 701/ 702/ 703/ 704/ 705/ 706/ 707/ 708/ 709/ 710/ 711/ 712/ 713/ 714/ 715/ 716/ 717/ 718/ 719/ 720/ 721/ 722/ 723/ 724/ 725/ 726/ 727/ 728/ 729/ 730/ 731/ 732/ 733/ 734/ 735/ 736/ 737/ 738/ 739/ 740/ 741/ 742/ 743/ 744/ 745/ 746/ 747/ 748/ 749/ 750/ 751/ 752/ 753/ 754/ 755/ 756/ 757/ 758/ 759/ 760/ 761/ 762/ 763/ 764/ 765/ 766/ 767/ 768/ 769/ 770/ 771/ 772/ 773/ 774/ 775/ 776/ 777/ 778/ 779/ 780/ 781/ 782/ 783/ 784/ 785/ 786/ 787/ 788/ 789/ 790/ 791/ 792/ 793/ 794/ 795/ 796/ 797/ 798/ 799/ 800/ 801/ 802/ 803/ 804/ 805/ 806/ 807/ 808/ 809/ 810/ 811/ 812/ 813/ 814/ 815/ 816/ 817/ 818/ 819/ 820/ 821/ 822/ 823/ 824/ 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1851/ 1852/ 1853/ 1854/ 1855/ 1856/ 1857/ 1858/ 1859/ 1860/ 1861/ 1862/ 1863/ 1864/ 1865/ 1866/ 1867/ 1868/ 1869/ 1870/ 1871/ 1872/ 1873/ 1874/ 1875/ 1876/ 1877/ 1878/ 1879/ 1880/ 1881/ 1882/ 1883/ 1884/ 1885/ 1886/ 1887/ 1888/ 1889/ 1890/ 1891/ 1892/ 1893/ 1894/ 1895/ 1896/ 1897/ 1898/ 1899/ 1900/ 1901/ 1902/ 1903/ 1904/ 1905/ 1906/ 1907/ 1908/ 1909/ 1910/ 1911/ 1912/ 1913/ 1914/ 1915/ 1916/ 1917/ 1918/ 1919/ 1920/ 1921/ 1922/ 1923/ 1924/ 1925/ 1926/ 1927/ 1928/ 1929/ 1930/ 1931/ 1932/ 1933/ 1934/ 1935/ 1936/ 1937/ 1938/ 1939/ 1940/ 1941/ 1942/ 1943/ 1944/ 1945/ 1946/ 1947/ 1948/ 1949/ 1950/ 1951/ 1952/ 1953/ 1954/ 1955/ 1956/ 1957/ 1958/ 1959							



**AUSTRALIAN AND NEW ZEALAND MINES—(Continued)**

Anglo-Chilian P/N	8½	8½	8½	9	10	0	7/0 Feb. 27 '96	10	0	3	35,000	Antofagst.	123, Bishop's-st W
" 8½ RylstMB	107	110	107	110	100	0	6½ Ju'y 1 '96	100	0	0	£20,000	"	"
Argen.Concessions	16	1/	3/	1/	2/			0	2	0	150,000	S. Luis ...	3 & 5, Queen Street
Caraltal.....G	-7/3	-7/8	7/3	7/8	2/8			0	2	6	1,330,000	Venezuela	57, Moorgate-st. E.O
Cayllama.....S	3	4	3	4	2	0	1/- Apr. '94	2	0	0	125,000	Pcu .....	52, Leadenhall street
Coion.....G	-7/3	9/0	-7/3	9/0	5/			0	4	0	200,000	Columbia	5, Cophall-bdgs. E.O
Colorado Nit. ....N	1	1½	1	1½	5	0	2/6 Dec. 16 '95	5	0	0	32,000	Chili .....	12, King-st., Liverp l
Colombian Hy.....G	2½	3½	2½	3½	1	0	1/- Jy 26, '95	1	0	0	75,000	Columbia	10, Blomfield-street
Coplapo.....C	5½	6½	5½	6½	2	0	2/ May 29, '96	1	0	0	100,000	Chili .....	Dashwood House, E.O
Darien "A".....G	6½	7	6½	7	1	0		1	0	0	49,553	Colombia	Manchester.
" "B".....G	7½	8	7½	8	1	0	r.w. Apr 29 '96	1	0	0	30,000	"	"
El Callao.....G	3	3½	3	3½	5	0	9½d. Feb. '94	5	0	0	£57,000	Venezuela	5, Bishopsgt.-st, Wa
Frontino & B.....G	1½	1½	1½	1½	1	0	9d. July 15 '91	1	0	0	120,000	Colombia	154, Gresham House
Glencock.....G	1	2/-	1/3	1/9	1	0	—	1	0	0	109,948	Arg. (& I.)	2-5, Queen-street, E.O
Guadalupe.....G.S	3/0	5/-	3/6	5/	1	0	—	1	0	0	120,000	Honduras	14, Union et. Old Brd
Javal.....G	7/8	1/6	1/6	2/8	2/-		—	0	2	0	105,769	Nicaragua	139, Cannon-street.
Lagunas.....A	2½	2½	2	2½	5	0	15p.c. Dec. '94	5	0	0	120,000	Tarapaca	3, Gracechurch st;
Lautaro.....N	5½	6	5½	6	5	0	5/- June 26 '96	5	0	0	110,000	Chili .....	70, "
Liverpool.....N	8	9	8	9	5	0	15/- May 1, '96	5	0	0	22,000	"	Liverpool.
London Nit.....N	1½	2½	1½	2½	3	0	3/4½ Nov. '95	5	0	0	10,000	"	9, Gracechurch-st.
" Nit.(Pref.)	3	4	3	4	4	0	4½ Nov. 25 '95	5	0	0	22,000	"	"
Maento.....G	7/3	7/8	1/-	1/6	2/-		—	0	2	0	200,000	Peru .....	11, Old Broad-st. E.O
New Tamarugal N	1½	3/6	1½	3/6	1	10	1s. Dec. '94	1	10	0	130,000	Tarapaca	50, Lime-street, E.O
" 8 % Cum Pref	7/6	9/6	7/6	9/6	1	10	3 p.c. Feb. '95	1	10	0	120,000	"	"
" 6 p.c. Debs .....	7/6	8½	1	1½	100	0	3 p.c. Feb. '96	100	0	0	£260,000	"	"
Orita.....G	7/9	1/3	7/9	1/3	1	0	1/- April '99	1	0	0	30,000	Columbia	10, Blomfield-street
Ouro Preto.....G	—	—	—	—	1	0	1/- Feb. '95	1	0	0	80,000	Brazil .....	6, Queen-street-place
Pao. & Jarpampa N	3½	1	3½	1	5	0	4/- May, '95	5	0	0	72,000	Tarapaca	3, Gracechurch-st.
Phoenix.....G	-7/3	-7/9	7/3	-7/9	10/-		—	0	0	0	400,000	S. Luis ...	3 & 5, Queen Street
Quebrada.....C	3½	3½	3½	3½	3	0	5% Mar. '92	3	0	0	241,958	Venezuela	34, Nicholas Lane.
Rosario.....N	4½	5½	4½	5½	5	0	3/- Aug. 13 '96	5	0	0	120,000	Chili .....	7½ Old Broad-stree
" 2½ Deb.)	104	107	104	107	100	0	5% Apr. 1 '96	100	0	0	£475,000	"	"
" Hu'r Db Corp	103	108	103	116	100	0	5% Jan. 1 '96	100	0	0	£200,000	"	"
St. John del Rey G	3½	7½	3½	7½	1	0	r.r.te Nov 19 '95	1	0	0	327,850	Brazil .....	Finaby Ho., Blm'd st
San Donato.....N	3½	1½	3½	1½	5	0	2/8 May 24 '95	5	0	0	32,000	Chili .....	12, King-st., Liverp l
" Jorge.....N	5½	5½	5½	5½	5	0	7/6 May, 29 '96	5	0	0	75,000	"	9, Gracechurch-st.
" Pablo.....N	1½	1½	1½	1½	5	0	5/- Oct. 30 '95	5	0	0	31,000	"	"
" Sebastian .....	1	1½	1½	1½	5	0	2/ July 15 '96	5	0	0	29,000	"	Dashwood House E.O
Santa Barbara .....	3	3½	3	3½	5	0	1/3 Dec. '88	0	10	0	60,000	Brazil .....	Liverpool
" Elena.....N	3½	3½	3½	3½	5	0	5/- Nov. 15 '94	5	0	0	23,000	Tarapaca	3, Gracechurch-st.
" Rita.....N	5½	4½	5½	4½	5	0	10/ May 29 '96	5	0	0	20,000	Chili .....	Dashwood House, E.O
Toijima "A".....S	4½	5½	4½	5½	5	0	5/- Mar. 11 '96	5	0	0	14,000	"	18, Finsbury-circus
" "B".....S	4	5	4	5	5	0	5/- Mar. 11 '96	5	0	0	8,000	"	"



## CORRESPONDENCE.

We wish it to be understood that we do not hold ourselves responsible for, and do not necessarily endorse, the opinions of correspondents. All communications must be accompanied by the names and addresses of the senders, though these need not necessarily be published.

## THE STRUCTURE OF THE PYRENEES.

TO THE EDITOR OF "THE MINING JOURNAL."

SIR,—The Iron and Steel Institute will, in their admirable excursion of the 29th inst., stand before a Pyrenean mountain where iron has been mined by every method, and smelted by every process during more than 20 centuries. In erecting any heavy machinery I have long employed that iron for the most essential parts, even when obtaining from Kalk or England the necessary castings or forgings. Before the recent progress of science the mines of the mountain in question were classified on known principles, and those of some persistence in depth were secured and subsequently sold to an eminent French leader of industry, whose name is identified with the Pyrenean railways. Being for many years consulting engineer to the original holders, the entire history is familiar to me. More than £300,000 was subsequently spent by others in preparations to extract ore from those lodes whose imposing outcrops are cut and destroyed by granite at a trifling depth. The rocks were Carboniferous, Triassic, and Cretaceous. Such rocks, according to the most positive assertions of French official geologists, could not be cut by granite veins. I alone continued to appeal to new facts of observation, confirming for the whole Pyrenees the genuine surveys of Dufrénoy and the founders of Pyrenean geology. Not only is the vital question of the duration and extent of iron mines involved in this purely geological issue, but the comparative extent, richness, and character of fine lodes of argenteous lead, copper, &c., in the same district is predictable in proportion to the integrity of their geological description. To depths of even 1300 feet beneath the surface I have enjoyed opportunities of following the granite intrusions miles away from all its surface outcrops, and beneath rocks classed as Cambrian and Triassic, in which I have collected a singularly beautiful and complete series of the most characteristic species of the Upper and Middle Cretaceous formations, within a mile of the mines.

This example being sufficient for the moment, I would next remark that every problem concerning the main value of lodes, and even frequently concerning the practicability of canals and other engineering works, depends on simple geological issues at present rendered insoluble, and angrily or contemptuously set aside by those desirous of dumping in the bottomless pit the savings of governesses, widows, peasants, and country parsons. Men whose domestic virtues are photographically displayed on every boulevard, and whose interesting families are even whimpered over by police magistrates, throttle science while they buy the Press. The devil, by entering the bonds of matrimony for very possibly a thousand years, has settled into an angel of light. Anglican Bishops even recite his praises in the technical organs of nature. His domestic servants, as collegiate deans and heads of the new education, teach filthy doctrines, and the hatred of all forms of religion and morality to boys caught and bribed in the parish schools. Their efforts to depress the tail, and to conceal the hoof, if any independent scientist enters their class rooms, have afforded great diversion to my friends. To the latter I owe entirely certain receipts which have enabled me to recognise amidst the one grain of truth and the dozen bales of humbug piled on every question of practical science, the adamant texture of the Eternal. In the conversation of Owen, the lessons of Goodair, the eloquence of Hofman, the jokes of Ramsay, the boyish brilliancy of Von Groddeck, there was an element entirely wanting to those who see in science a ladder from the gutter to the University. To my earlier instructors science was in fact admittedly the surest road from the University to the gutter, and to the most honest and most practical of all English geologists life was a struggle for daily bread and death, and obliquely the inflated reward. Percy, with unusual advantages, suffered a similar fate. In the Pyrenees despair and suicide have successively removed each observer who has ventured to assert the truth. As the essential price of what knowledge I have been able to acquire, I have been compelled to face probably sudden death certainly 50 times; and as neither bullets at 10 paces, fearful threats at a safer distance, nor financial webs of attractive texture have robbed me of finally absolute independence, I may be allowed to speak occasionally of that stone which to a great alchemist, whose noble presence fills the most vivid recollections of my youth, surpassed in value and significance all attainable things.

Since my last letter I have received the latest number of the *Bulletin de la Société Géologique de France*, dated June, 1896, containing the conclusion of one of my scandalous appeals to quarries, ditches, mines, and other unconsidered trifles inconveniently concerning theories that embrace several quarters of the globe. The first portion of a geological survey of the Hautes Pyrénées appears in the same number, and describes numerous sections and a geological map destined to prove that the identical Cretaceous slates described in my last two letters are Cambrian or Precambrian, that they contain no fossils, and that all supposed Cretaceous penetrated by granite is of similarly remote age. Universal negatives are the daily nourishment of the writers who have announced that the Alps are upside down, that Provence has coiled itself like a Pharaoh's serpent, and that the folds of strata have been from all eternity arranging themselves exactly along the lines fixed by a gentleman whose progress to this conclusion has attracted my interest since his first appearance on any stage. I sincerely trust that no accident may delay the publication of the map and sections already described in the distributed *Bulletin*, for that map and those sections will for ever explain the methods and value of the new geology. The last General Director of the Geological Survey of France described my maps as "a priori inadmissible." I can more modestly reply that this criticism is inevitable to one who judges by maps that are a posteriori absurd. Short of swallowing the Cretaceous fossils that I have found in all the best examples of the "Cambrian" of the directors and principal collaborators of the official survey, their employés cannot escape collecting some of them in the end. To discuss their geology of the Alps would, I think, be at present superfluous. *Sic transit gloria mundi*. I must remark that the author who has kindly furnished the coffin of the new geology has done his work with talent, and has with politeness promised to explain the manner in which my blunders have grown up. In a map which I furnished at his request for his principal geological work, I supplied him with the geology of the border of the Hautes Pyrénées, and in recent papers I have dealt with the rest. He had, consequently, only the easy task of correcting my blunders, and so preventing the harm which might have resulted from my announced mappings of the Hautes Pyrénées. He has especially concerned himself with the environs of Lourdes and Bagueres

de Bigarre. Thirty years ago, after taking the first place in geology at the Royal School of Mines, I devoted two months to the environs of Bagueres de Bigarre, and I have for several years been spending much time in solving the palaeontological difficulties which contradicted the stratigraphy. I have now completed this task of mere patience, finding, of course, that the entire difficulty had been created by hasty and theoretical determinations of fossils, which determinations I could not but respect. My learned colleague in the same field had not time to visit the museum where these fossils are preserved, nor to extract them anew from the exposures that originally supplied them. The hurry and elaboration of his paper doubtless left only a few hours for field work. Similar palaeontological evidence has throughout the Pyrenees formed the basis of laboratory work that occupies large portions of the *Bulletin des Services*, and consists regularly of a mountain of second-hand erudition and mineralogical descriptions that contribute nothing to the question.

At Bagueres de Bigarre not a single fossil really characteristic of the Lias has ever been found. The fossiliferous limestones classed as Lias rest on a conglomerate in which I have found Cretaceous fossils along half the Pyrenees, and which has been wrongly classed as certainly Triassic. Through the Lower Cretaceous slates beneath this conglomerate the Ophite has risen against the bottom of the overlying limestone, and has there spread out in sheets that microscopists describe as beds and contemporaneous lava flows. The granulite and granite has done the same thing. The metamorphism inevitably resulting has, in proportion to the nature and intensity of its effects, led hasty tourists to recognise formations of all ages in the Cretaceous sheet, and to class successive synclines of the same age as successive outcrops of all the geological formations. That is the fundamental secret of the structure of the Pyrenees. Last year I had brought the question to a recognition of the Alpine Trias as largely present. The completion of some details, delayed by bad weather, has enabled me to ascertain that what is recognisable as "Alpine Trias" in both Alps and Pyrenees, is, like the Flysch, a facies of rocks of various ages, but mainly Cretaceous. The working out of a fundamental error necessarily produces absurd conclusions. The ridiculous stratigraphy of the new Alpine geology is the *reductio ad absurdum* of such field work as has been produced in the case I insist upon in these letters. Geologists may go back in peace to the geology of Ramsay and Jukes. The third volume of Suess will never appear, or will be like the mouse that issued from the mountain. Mining science can still advance on an intelligible and comparatively simple basis, which will not be caricatured and confuted with by every budding genius. It has lain, in all essential features, accessible to every observer who can recognise the indelible mark of the beast on the incrustations that obscure its face. To separate description from humbug was the one insuperable difficulty to every genuine master of the subject. They were not far from the formulation of the remedy, but they perished before it left their lips.—Yours faithfully, P. W. STUART-MENTREATH, Argelès, August 31.

## PROFITABLE FIELDS FOR BRITISH INVESTORS.

TO THE EDITOR OF "THE MINING JOURNAL."

DEAR SIR,—Bearing in mind the enormous amount of British capital "invested" in so-called "securities" of foreign States and some American Republics, and also, unfortunately, the great losses consequently suffered by many ill able to afford it, I should like (being a regular reader of *The Mining Journal*, and having acted upon its most reliable information) to thank you for calling attention to New Zealand mines; and to the safety and profit obtainable by investors carefully selecting mines and other enterprises in our own colonies. There is, I may add, this additional advantage in choosing this channel for one's spare cash—it creates what has been wanting in many Englishmen, an intelligent and abiding interest in the successful development of the British Empire.

Your very able and detailed articles on New Zealand mining prove beyond question that that favoured colony will long continue to be a marvellous field for profitable investment. Those who have but a slight knowledge of the colony are aware of its great progress since the successful close of the Maori war. With all the advantages of modern civilisation there are now in both the North and South Island increasingly large cities with many fine buildings, mostly due to British enterprise and money. This health-giving colony is specially attractive, because it is so home-like, so fertile, so rich minerally, so small compared to Africa or Australia, and so easy of access to nearly all parts owing to the iron horse's rapid stride.

The famous Waihi Company has shown what a great improvement in mining has followed the adoption of the cyanide process and the best plant and machinery, making profitable many an otherwise unprofitable mining venture, and almost indefinitely extending this highly remunerative use of British capital, provided companies are not over-capitalised, and their management is energetic and honest. Another proof of the progress of the colony is seen in the Nelson district of the South Island. Until recently scarcely anyone knew of the wonderful property of the Taitapu Gold Estates Company, because it was a native reserve. But Messrs. Beetham and Parkes brought it before the English market in August, 1895, and already the development is remarkable, and it promises to be one of the best investments for British capital, as almost every mail brings fresh proof of the surprising richness of its gold-bearing areas. Several influential exploring companies have paid substantial sums to the Taitapu Company for the right of prospecting, and have taken up those rights, and others are eager to secure a like privilege. The parent company possesses an absolute freehold of nearly 90,000 acres, comprising besides the gold-bearing parts of the estate extensive coal deposits (officially reported at over 30,000,000 tons), valuable timber and water supplies, and it has a sea frontage of about 23 miles extending from Kahurangi Point to West Wanganni Inlet. The Mining Department of the New Zealand Government I believe are reporting upon this unique property, and the company's manager, Mr. Low, will shortly be in this country, and will then doubtless give many interesting and satisfactory details. I have, however, I hope, shown sufficiently the importance to British capitalists of investing their money in our colonies in preference to foreign "securities," and that not least among the profitable fields will be found New Zealand.—Yours sincerely, E. W. T. Lodore, Ventnor.

## THE POLLUTION OF WATER IN BRITISH COLUMBIA.

TO THE EDITOR OF "THE MINING JOURNAL."

DEAR SIR,—Perusing an old *Mining Journal*, I came across the statement "the mining industry of Columbia has been paralysed by the unexpected enforcement of a law respecting the pollution of rivers."

As this question may again crop up in other parts of the world, I suggest that a device of mine, which I will explain, be made known through the medium of your valuable paper.

Where there is a polluted water difficulty, a series of "alum

catch-pits" and a large reservoir generally exist, but which do not sufficiently purify the water. This failure is owing to the fact that inflow and overflow of water are simultaneous.

It has been observed that in a few hours, after work in the mills is over for the day, the water in the reservoir becomes perfectly still, thus the suspended matter is better enabled to gradually sink to the bottom.

When the supernatant water begins to clarify, it may be gradually and continually taken off by means of a floating apparatus, now to be described.

The apparatus consists essentially of a hollow vessel, made of thin sheet iron by preference. At the bottom of the vessel there are two holes, which we may call the inlet and outlet. These, of course, can be made to take any given quantity of water.

The supernatant water enters the vessel through the inlet, and is drained off by means of an india-rubber hose of suitable size. This hose is fixed to the outlet; the other end is attached to the bottom part of the sluice. The water is thus discharged outside the reservoir.

The inlet is provided with an appropriate valve arrangement, whereby the apparatus may be regulated, or its action entirely stopped when necessary.

Moreover, it is provided with four chains of light section and of convenient length, which are attached to a frame standing out of the water. When the apparatus sinks to a certain position it hangs by the chains, and is thereby prevented from coming into contact with the thick slimes.

Prior to resuming work in the morning the inlet valve is closed, not to be opened until the surface water is again clear in the evening. This procedure is repeated daily.

It gave great satisfaction at the Castillon Mine, France, and the Lidjessy Mine, Asia Minor. Its construction is simplicity itself, and is inexpensive.—Yours truly, EDWARD ANSTON, Halkin Mines, Flintshire, September 9.

## THE PREMIER BOGUS GOLD FIELD.

TO THE EDITOR OF "THE MINING JOURNAL."

SIR,—I observe in to-day's leader of the *British Australasian* a cry of despair over the greatest fraud of the century, Western Australia as a gold field, forsooth! and the reason for that cry is not far to seek.

For a long time now your highly esteemed contemporary has been writing up this gold field, and so have you, Mr. Editor, though doubtless in a more discreet fashion, and, therefore, neither of you, can find fault with fair and honest comment, when every one is just beginning to examine the dark side of the picture, and instead of gold extraction from the bowels of the earth, the far more disagreeable operation of gold extraction from the pocket is the only tangible acquisition it can boast of. Whilst British and other European capital continued to pour in, and the boom thus successfully engineered by the crowd of interested fabricators, no one ever dreamt of working out the economic problem so long as the ball kept rolling; but when the mirage had disappeared, and the unfortunate investor fully realised that out of the sunbaked arid waste it would cost over £5 to extract £1 of the precious metal, and is likely to cost more as the pace increases, he finds a difficulty in shutting the door before the last sovereign has gone. How many paying concerns are there? Try your best, and you would not find half-a-dozen. Surely after all this flourish of trumpets during the past three years there might have been something better. In any case, the greatest pessimist could never have estimated worse.

Everyone is living, and every township is built upon capital introduced, and there is nothing in the shape of agricultural or other industrial enterprise to fall back upon, which so far forms a backbone after all, as labour must exist at a reasonable figure before owners can produce at a profit, and that seems highly problematical for a long time to come, if ever it comes at all.

The exodus from all the neighbouring colonies tells its own disappointing tale, when the worn out miners daily return in crowds, only to recapitulate the hardships experienced all throughout the piece at the instance of unscrupulous and interested speculators.

Every newspaper to hand contains at the best but a half-hearted sinister expression, or commendation, or whatever name you may chose to give it, when referring to this so-called Elysiun, but no amount of plastering can ever heal the sore. The expansion, as it stands, is a failure—an utter failure—and a fraud.

No doubt your contemporary, means well, and assuredly would prefer to see their friends make money; but they are wrong—absolutely wrong—on this occasion, and it almost looks as if they knew it.—Yours truly, DONALD STUART, 57, Gracechurch-street, September 10.

## ZEEHAN MONTANA (TASMANIA).

The directors state that they are now enabled, in fulfilment of the forecast made by the Chairman at the annual general meeting held on June 2 last, to declare out of the profits of the company an interim dividend at the rate of 8d. per fully-paid share, and 6d. per share 15s. paid. Warrants for such dividend will be posted to all shareholders registered in the books of the company on the 30th inst. The shipments of silver lead ore, advised by cable as being in course of transit, are the largest the company has yet had from the mine. They comprise a total of 605 tons, of an estimated net value of over £10,000. In addition to this 180 tons have just been delivered at Antwerp per the *a.s. Oudeburg*, of an estimated value of £3000, of which £2750 have already been received. The directors further announce that, as the result of a lengthy negotiation, they have concluded the purchase of a block of land immediately adjoining the company's eastern boundary, and comprising in all about 26 acres. Having regard to the fact that all this company's lodes dip easterly, and must, therefore, in depth pass beyond its original eastern boundary and enter the property in question, the directors look upon this purchase as of some importance. Moreover, the present main shaft will, in consequence, occupy a more central position in the combined properties, which will now consist of about 60 acres, and the company will be enabled to continue the development of two lodes which have already been worked with good results right up to the previous eastern boundary. The purchase price agreed to be paid for the additional land, which is held under the usual Government lease, is £3000, and the directors can, if necessary, defray the whole out of the revenue of the company. As, however, this is clearly an expenditure on capital account, the directors have decided to offer the whole of the remaining unallotted capital of the company, amounting to £2370, to the present shareholders, so as to partially replace the amount now being paid out of revenue. The shares will be payable—5s. on application, 5s. on January 1, and 5s. on July 1, 1897, after which date further calls, if required, will be made in the same manner and at the same time as calls on the other shares of the company on which 15s. per share has already been paid up.

THE BALAGHAT MYSOOR MINES (LIMITED) have paid the gold obtained during the month of July, which realised £757 7s. 5d.



## REPORTS FROM THE MINES.

BRITISH MINE.

**WEARDALE LEAD.**-Report on company's mines for the week ending September 5: Gloverake, 8 sinking sump from 60 fathom level, more plate; we are clear of the vein and the ground is better to work. Crosscutting north from Maddison's drift, two very strong veins have been cut, each about 3 inches wide, quick in ore. Tribute ore for the week 12½ bags.-Bibbston. No work being carried on at this mine as the men are eaten strike.-Greenlaw, 1 float up to 12 ft., 12 cwt. per fathom. Sinking down to 12 cwt. per fathom. Stopes worth 18, 20, and 16 cwt. per fathom. Steely Hazel drift driving and stopping east in Slatey Hazel, vein poorer for ore, holed into an old rise, end worth 12 cwt. per fathom. Lowe's drift, a strong vein looking better for ore, end worth 12 cwt. per fathom. Stopes worth 13 and 12 cwt. per fathom.-Silling. Driving B level end, strong vein worth 12 cwt. per fathom. Stop at above 51 fathom level, no work being done here. At bottom of Nattrass Gill H level, sink down 13 ft. without meeting Park level, no change. Ore raised for the week, 25 tons. Ore dressed for the week, 31 tons. Sault mill stopped to sweep the chimney.

AUSTRALIA AND NEW ZEALAND.

### AUSTRALIA AND NEW ZEALAND.

**SOUTH KALGURRI.**—Extracts from 1-tier from mine manager, dated August 3:—The main shaft has been timbered and cemented for a distance of 30 feet from the No. 1 level. The opening out set has been fixed and doors swung at the chamber No. 1 level. The shaft has been sunk a further depth of 10 feet, total depth 182½ feet. The ground is becoming more favourable. No. 1 level. The west crosscut has been extended a further distance of 12 feet, total 137 feet. The drift is thin, a fine quartz vein about 8 feet thick, containing veins of quartz assaying 1 ounce gold per ton. Samples taken from the formation other than the quartz veins assayed 8 dwts. and 11 dwts. gold per ton. The crosscut is now in a favourable slate country carrying a small quantity of gold per ton. Tenders are now being invited for extending the west crosscut a further distance of 53 feet, and also for running a drive south on the course of quartz formation for a distance of 53 feet. I anticipate this work will lead to still better formation and a more productive drive south. To the south.

better development than those reported.—No. 1 lode, No. 1 shaft. The south drive has been connected with the main shaft. The lode which passed within 3 feet of the shaft holds rather strong and maintains a fair average assay value, 13 dwts. of gold per ton.—No. 2 north drive. This place has been continued with two shifts, and run in a further distance of 20 feet, total 43 feet. The veins on which this drive was started have given place to a body of ore about 4 feet wide. When first entered upon this lode gave an assay of 11 dwts. gold, the distance 20 feet to the south. The lode is 20 feet wide.

gold per ton. At the distance of 33 feet the lode changed its course more toward the east. A marked improvement in the quality of the ore took place, free gold showing. This has been followed on for a distance of 3 feet. When the lode was 36 feet from the surface the ore was found to be in a most favourable development, the continuance of which I hope to report in future.

EMERALD (Reward).—The manager reports under date Yalgoo, July 3<sup>d</sup>, as follows:—Point No. 1, surface. This has been discontinued for the present.—New main shaft. Three of the six men I had working in shaft No. 1 are now engaged here (the other three have been discharged), and are doing good

work. The formatin continues much the same, but is ha:dening fast as sinking is proceeded with. The shaft is now 12 feet deep.—Shaft No. 5, I have still one man stoping on the series of small leaders, and am pleased to say fairly good gold is met with in some of them. Unfortunately, the veins are very small, and not of a permanent nature.—Point No. 2, shaft No. 1, The labour, as you will see above, has been withdrawn from this point, as it was found quite impossible to combat with the

inflow of water at the bottom of the shaft, although we had six men bailing continuously in three shifts. I feel confident that had the necessary pumping appliances been put to work in the first shift, the men enabled to sink this shaft a further 25 or 35 feet, and the water level reduced to 20 feet below the surface of the rock. The two men employed here have finished stoping and started a new shaft at 20 feet to the westward of the shaft recently filled in. They are down about 13 feet. To-day exemption for three months from labour conditions was obtained, as that being the case I am having the men removed to the Emerald Reward lease.

The reef in the shaft just begun is about 18 inches at the bottom of the shaft and apparently making as it goes down; it, however, shows no gold to the naked eye. I shall "dolly" a piece to-morrow.—Battery. This was sinking full time for three days last week, but on account of the engineer having to proceed to Northampton the battery has only been running two shifts of eight hours each, as we have only two engine drivers (uncertificated), and the Mines' Regulation Act prevents those men from working longer hours. The plates are

far, I regret to say, look anything but promising, as it is only low grade stuff that is being treated at present and chiefly from the surface. Shamrock stone "dolled" and panned off only showed fine colour.

**BLAGOVES' FREEHOLD.**—The agents report under date July 25: We beg to hand you the following report for the four weeks ending as above. Main croccost east from 183 ft sheet. This has been extended 52 feet by two men. Since our last report the country rock has given evident signs of improvement.

Since our last report the country rock has given rise to all kinds of interpretations, which we are pleased to say continue so, though still hard to work. There are more traces of such minerals as usually accompany the deposits of gold. The rock is andesite and not basaltic. To-day we cut a small leader from 1 to 4 inches wide, containing white sugary quartz and silica, also high y mineralized. The direction of this leader is south-west by north-east with a westerly dip. -Crosscut north from main crosscut. This has been extended 11 feet by four men, and we believe will intersect the leader running east and west.

four men, and we believe will intersect the leader running east and west dipping north at a distance of 40 feet. This is the leader from which we obtained good fish prospects on the surface. We shall push this drive forward, anticipating good results.—Pitwork. During the month we have completed the column and all necessary work connected therewith, such as bringing the drawing lift to surface, cleaning down shaft of all bearers, stays and sliding road of drawing lift, etc. The plunger pole is started and works satisfactorily. Run of ore, Refractory, f. m. x. l. s. better, the old shaft

and works satisfactorily.—Surface. Referring to my last letter, the old shaft there mentioned has been cleaned for a further distance of 25 feet and the drive has been retimbered another 50 feet. The winch referred to has not yet been reached, as we have to penetrate and retimber a further distance of 25 feet. We, however, anticipate reaching that point shortly. As soon as the shaft is cleaned all the way down to the bottom, the timbering there

It was found necessary to

**HAUBAKI.**—The manager reports under date July 27: Herewith I beg to hand you the following report for the four weeks ending 25th inst.—Engine shaft. This shaft is now sunk to a depth of 232 feet. The channel of rock in the present bottom is very favourable, and we should now soon intersect the No. 3 reef. In respect to this No. 3 reef, so far as developed in the 220 feet

level it has not been of any value. We hope, however, when interested with our engine shaft to find an improvement. We have been delayed during the past month in sinking the shaft, owing to a breakage in our sinking windore. We also broke the clutch gear to one of our winding drums, which also retard-d progress. Everything is now, however, in good order and working well.—320 feet level north, No. 2 reef. This level was extended 13 feet in a disordered reef and suspended.—Winre below 220 north. In order to be

prepared to open up and ventilate this section of ground below the 220 to our 320 feet we have sunk a winze 11 feet. The reef so far as sunk in has averaged 12 inches wide and produced rich ore. Having reached water level it has been expended until we drive our crosscut westerly from the 300 level to drain the water. We have started another winze below this said level now down 8 feet, reef averaging 14 inches, very strong well-veined reef or no gold has yet been met with. We shall go on sinking to water level or as deep

As we can see, our present sump, 80 feet in the shaft, will give us on the line of 7 of my 90 feet of backs, therefore by sinking these winzes as deep as water level until such time as the 300 feet is drained, will give us an opportunity to ventilate the 300, and opening up our reserve without any delay. It is very gratifying to find that our gold continues to go down below our 325. The two winzes referred to are being sunk very near the line of winzes sunk from the level above.—Stopping above 220 feet level No. 2.

in which some rise to the level above, -stopping above the reef in the north. Our stops above this level during the mo to have yielded well, the reef being 18 inches wide, and producing rich specimens of corals, which have been the main source of keeping up our returns. -No. 3 reef 220 feet level north. This has been driven on 17 feet, the reef in which is very clear, and for the present suspended. Just behind the foremast we have intersected the cross reef. We have driven 14 feet north on its line and 6 feet south, and also risen above the back of this level. This reef, in coming in

also risen above the bank at this level. This rise, in doing so in contact with No. 3 just below the 153 feet level, became disordered, but at the 220 ft has again considerably improved, having yielded during the month occasional stones of picked specimen gold ore—150 feet. The Iowa crosscut east has been advanced 27 feet, total 541 feet. The crosscut is passing through a very congenial field for gold. We tapped a strong body of water just behind the fore-breach, which indicates we may be nearing another reef. Another 40 feet disordered here will reach our boundary between

another reef. Another 40 feet diving here will reach our boundary between this and the Kathleen Company's property.—Consent to Iona shaft. We have driven a crosscut from the 160 feet level crosscut a distance of 50 feet, and effected a communication to the Iona shaft, (thus enabling us to repair this shaft from here to surface.—8 oping on No. 2 reef above 160. The slopes at this point average 15 inches, and are producing low grade ore.—Rising on Iona No. 2 reef above 160. We have risen on this reef

87 feet. The reef in this rising has been somewhat disordered, and not so clearly defined as in the winza being sunk from above. It is just possible we are rising on the hanging wall portion of the reef.—Stopping on No. 2, north above 160 feet level. The reef in these slopes averaged 6 inches wide. The ore here is of a low grade being near the point where our reefs in going north get disordered and valueless, both above and below, considerably before we reach our boundary.—St. bing on New Year's reef above 160 feet level. The slopes

on this reef averaging 18 inches wide and have produced during the month some rich ore.—Driving north on the leader of the hanging wall of the New Year's reef at 100 feet level. The reef here is about 6 inches wide and producing good grade ore with gold now showing in the forecrest, distance extended 35 feet.—Stopping on cross reef above the 100. This reef which averaged about 4 inches in the stipes above the 100 feet level has yielded first-class ore. These stipes are now nearly blocked out to the 100 feet level.—No. 2 reef 100

feet level. These slopes south of tributary wine has been intersected to the additional level. A large quantity of fair crushing ore was obtained from these stopes during the month. We have still a large amount of low grade ore southwards, which will be stoped in the hopes of meeting patches of gold in so doing. - Stopping on No. 3 reef above 160 feet level. These stopes have been completely booked up to the tributer's workings, and the men are now stoping the cross reef over the 160 feet level with good results.

Returning, We treated for the month 370 tons of quartz and 863 lbs of pitted gold ore, which gave us 2185 ounces 12 dwts. of melted bullion, realizing \$2977 15c. 10d., and a profit of approximately \$5000. The battery is in good order and working well. Our engineers and carpenters are getting the poppet heads built and the machinery in order for erection on the surface at the Iona shaft in accordance with your authority. The Iona shaft will greatly assist our development in the Iona section of our property. In conclusion

I assist our developments in the loan section of our property. In conclusion,

**KOMATA REEF.**—The acting manager reports under date August 7: On the 4th and 25th ult. I visited and very fully examined your property. Feeling anxious to know the condition of the new road up the Komata Creek I took this route with Mr. E. F. Adams, the company's surveyor. Knowing that several bridges were required to make it fit for horse traffic, we decided upon traversing it on foot. This proved wise for the new earth cuttings in places were so soft with the very heavy rains lately experienced as to make consideration of it almost impossible for horses, and in many places more than knee deep in mud. The contractors, however, have reached the battery site with the earthworks, leaving the rocky point to be got away, and bridges and culverts to be built. The completion of these should not take more than a month, providing the material could be got up for the purpose, but this difficulty is insurmountable until the dry weather sets in and makes the ground hard enough for wheel traffic. I consider this very unlikely to occur until late in October, and think it is hope-

enkle deep. After inspecting the alterations and additional work required to preserve the race in the places already mentioned, and after discussing the matter with our manager and Mr. Adam, I agreed to the extras as shown in my report, and I am now convinced that this was the best course that the work was necessitated. Its completion will save serious injury which would occur through waiting. The demand for this extra is moderate. A suit at law would certainly have cost our company in much greater cost. The race as it is now is a splendid job, and there are no better ones in the district. The period of maintenance and deposit required by law of one month will expire in less than 31 days, when a sum of about \$250 will be required for final payment. -Tramroad. This has been well laid out alongside the main Komati Creek and with a general down grade for three-fourths of the distance, the rate of descent at the rate of 1 in 30 to the top of the kins. I had hoped by placing the grade at the bottom instead of the battery to obtain a fall the whole distance, but found this impracticable. After inspecting the ground and plans I instructed Mr. Adams to

produced by the present system of working the mine. Mr. Adams to give estimates for the alterations necessary to make a course of being worked by a bogey instead of horse. I am convinced the saving to be effected by adopting this course will be immense. The difficulties of food supply and of metal for a horse road will always be costly, while stabling horses in a dense bush will give rise to a lot of labour. On the other hand the extra sleepers required for the locomotives only require to be split on the ground and any kind of ballast will be effectual. In the Wahi-Silverton road adoption of this power has enabled us to use the best material to carry large quantities of ore daily with great regularity. The line of aerial tramway has been cleared. This will open up spaces for hoppers and trestling loaded. The power to drive this will be taken from the workings creek before the water falls into our dam. I have given instruction to take out this further right in case our present powers do not control it. Together these tram lines will carry our ore at a very low cost.— Mine. Steady progress is being made in straightening the floor of the drive on

Argall's lode north the crosscut, the two levels having a difference of 3 feet on the floor, owing to its being worked from two crosscuts. The drive on Argall's lode south of main crosscut has been extended 3 feet into a very wide lode, very easily broken down, and carrying very good gold. It has become necessary to timber this place, and sets have been put in up to the main crosscut from the face. Timber has also been put in north side of main crosscut. No work has been done on the main crosscut for past month, but it has been decided to trim it up, feeling that there is a vein of quartz in the face, and that the country is softer and more kindly. Also that the black reef may not be far off according to its position on the surface, thus giving every encouragement to proceed a short distance farther. Men have been put on in this place this week. A commencement was made with the low level tunnel a fortnight ago, preparing to open out the drive by cutting off the surface and shooting up siding for face and tram. The face is ready to open out for underground work and will

need timbering. The water wheel and fan gear have been erected and are awaiting belting. The timber being all worked out the last pit it has become necessary to fell new trees and build a new pit. This has been done by clearing a new area and constructing a large lot of timber required for rails, &c. On the water race, the contractors have completed the dam No. 3 section, together with No. 4 dam. Besides this, they have put out all timber for extra works, and have put in extra fluming at slip, laying it on ground and covering it, thus obviating any shifting taking place. The weather has not been too good in past month for outside works, but the men have labored hard.

**KATHLEEN GOLD MINE.**—The manager reports, under date July 27: I beg to hand you the following report of progress for the month ending 25th inst.:—Hartridge's shaft. This shaft is now down to a depth of 144 feet. The reef, the improving of which was the object of this mineralised. Fine material is increasing. If we were no longer a reef. We would not be so deep as our preliminary machinery will allow, before cutting a chamber and opening a croissant to our reefs. Our first point of interest in driving from our shaft will be to cut the Golconda reefs. I am having a survey made to determine as near as possible the distance we shall have to drive to intersect these reefs. You will notice them marked on the plan I have sent you. I may say that these reefs alone are very important to us. They are being developed by a local company known as the Huron North, and have during the month with paid a rich ore. I am in great hope to coming to the channel of reefs are passing through in the shaft, provided it continue to the Golconda reefs, which should pass throughout our premises, of making

The Golconda reefs, none of them as high as our property, or making reefs, as we call them, at the same rate, when we are sinking, and many reefs in the adjacent ground, & taking their approximate run, which shall make our shaft, that at any blast we may discover one or more of them before we drive to the Golconda reefs. I should mention that at present we have got as much water as we can pump and sink with. If we are beaten by water increasing as sinking progress we shall do our best to start opening out a level. The future of the property, so far as I can judge, is very hopeful. I trust at constant diligence we shall be in a position to demonstrate this by discoveries of gold.

**K. PANGA**—July 25.—The agent's report under date, "W. beg to hand you this following report for the month ending the 25th 1st, 1904.—Lusach's engine shaft. This has been sunk 21 ft 6 in by 11 min, making the total depth 16 feet below the 800 feet level. Of late the water has increased very considerably, partly in consequence of the heavy floods. Owing to this influx we have been obliged to drive the pumping engine up to nine strokes per minute in order to carry on the sinking of the engine shaft. The rock passed through during the sinking is of the same conglomerate as that mentioned in my last report, although much harder and stronger. It is cut by a small line of red sandstone, which runs east and west dipping north, carrying a few colours of gold, which I think must be a dropper from the reef intruded at the 910. As depth is attained the rock has not the same disturbed appearance as in the upper levels, but is very compact. The shaft has been timbered and cased, also floats put in and sinking will be pushed on with all possible speed until the 1300 feet level is reached.

er-arches, which we hope are long to accomplish. We have cut in the east at the 80 feet level for batters, and put same in position to carry the balance life, which is on the mine, and in all probability will be in working order in a fortnight.—Rising above 300 crosscut on the Kpangara reef. The rise, which is 14 by 6 feet, has been extended 10 feet by four men, making a total of 124 feet. The country has the same disturbed appearance, and is letting out water faster than the reef above 3 feet. This shows a slight improvement, and carries a well defined hanging wall. The quartz ag-against the hanging wall is about 3 inches and is very promising, but so far we have only had dish prospects. The country rock is getting much softer, and we hope to make better progress in future.—Driving north on Kpangara reef above 50. The drive was extended 15 feet by two men. The reef which is 3 feet thick and carrying a well defined hanging wall is composed of quartz and pug highly mineralized, but so far no gold has been found. The country rock is improving, carrying small mineral veins. Our intention is to drive north, and descend in order to reach the main reef.

to push the drive ahead in order to prospect the ground to the north of engine shaft.—Stopping north of Gilroy's rise above 880' on Kapanga reef. These ropes have been worked by four men with shaft and rope 15 by 10 feet. The north stop is by 8, but the men have only produced ore of low grade. Seeing the shaft opened up to a distance of 30 feet in length and 70 feet in height, it is our intention to block this out to the 420, as it is under the run of gold obtained in 420.—Rising above intermediate on Kapanga reef north of Benny's rise. This has been extended 8 feet and stoped north 15 by 8 by two men. The reef in rising has improved, showing colours of the precious metal at times, although the country rock is very hard. The reef is 2 feet thick in the north stop, and a fine body of stope, but the men are not working the last-measured rise. The north stop measuring 45 feet has been worked by two men. The reef is very small, only 4 inches thick, composed of quartz and pug mixed with calcite, but so far nothing worthy of notice has been met with.—Extending the 420 south on Kapanga

reef. Two men have advanced the drive 16 feet, and the country rock passed through is very hard andesite, highly mineralized and letting out water freely. The reef is about 2 feet thick, and is a fine body of stone, but so far we have not encountered any of the precious metal. The indications are really good, and in all probability the company will obtain some good result from this portion of the mine, as the work done on the Kapanaga reef at the 120 level in the way of proving the reef, has been very little. We shall pursue



on this drive in order to get under the runs of gold met with in the upper levels. The drive is considered very important, as the slide met with in the 300 is dipping south at an angle of 45°, and as gold was made in the north side of the slide there is every reason to expect the run of gold to be continued on the south side. The drive is 200 feet long, and the rise has been extended 21 feet by two men, during which we obtained some rich stone that I estimate would pan out 5 ounces to the pound. The gold was cut out by a slide which we have passed through, and the reef is making again, so that we hope to pick up the run of gold referred to above. We have done some sloping north and south of the rise, which together measured 17 by 8. In taking up the leading slope north and south we found some small but very rich stone, and we are hoping that this will turn out to be a continuation of the rich shoot met with in the 300 and intermediate. Being above intermediate on Scotty's hanging wall portion. The rise has been extended 18 feet by two men through a country at present very broken, but a good class of sandstone for gold. The reef is 10 inches thick, composed of quartz and pug of a very dark colour; this is also looked upon as a good indication for gold. In breaking down the reef, we have seen strong blotches of gold, and there is every appearance of improvement. As the footwall portion gave very good ore, and was opposite the above-mentioned workings, we are expecting something good ere long. I have examined Larouch's engine shaft, and find that repairs are necessary. About 40 feet below the collar the timber is showing signs of giving way through the great pressure of the ground. These repairs will be effected at once, in order to make the shaft secure. Corby section. No. 1 level has been extended 32 feet by two men, making a total of 114 feet. During the drive the reef has carried a good hanging wall, and at times has widened out to 10 inches of solid quartz; but, unfortunately, nothing of importance has been encountered. The country rock in the forepart is changing for the better, being decomposed and highly mineralized. Being above No. 2 level, the rise has been extended only 5 feet owing to the influx of water, which renders it unsafe for men to work; however, the worst of the winter is over, and we shall soon be able to push on with this work. The reef in the top of the rise is a fine body of stone, but so far we have not seen any gold. Corby shaft. The men are now making the necessary preparations for sinking the shaft, in order to intersect the reefs that are known to exist, and seeing that the adjoining mine is getting good gold near our boundary, there is every inducement for us to push on the sinking. Surface working, driving crosscut east of Corby's winze. In order to intersect the Kapanga reef the crosscut has been extended 9 feet by two men. The country rock is very hard stone, and has the appearance of the Kapanga hanging wall. We expect to intersect the reef in the next few feet. Month's results. We have crushed 100 tons of quartz for a return of 31 ounces 10 dwts. of melted gold, valued at 55s. 9d. per ounce. All machinery and pitwork working well.

KOMATA QUEEN.—The acting manager reports under date August 6: The developments in this mine have been considerably retarded of late by the extremely wet weather, making out-door work at times impossible sometimes for days together. The surface of the mine is covered with dense bush, and being over 1200 feet above sea level, it is for a greater portion of the day raining or covered in dense mist. Owing to the dense vegetation the work of tracing the lodes from the Komata reefs has taken a large amount of time and effort, especially as slides have caused displacements of the surface under which the cap of the lodes are lying, this having been especially marked in the Lavington lode, where the Argall lode, though less affected by displacements, is much more heavily overlaid by slip and overburden, and, therefore, more difficult to trace. The Lavington lode has been traced through the E. lode mine to the Queen boundary, and along its course in your mine the timber has been removed, and for a great distance the lode has been bared, but in no place has it been cut into, the object being to develop the surface outcrops as far as possible before heavy rains set in. This lode all through is a very fine body of ore, and in some instances forms a large precipitous wall, the underlie being very slight. Towards the bottom of the gully which is very steep, it is observable in this way for over three chains in length. At this point the Argall lode, which in like manner has been traced down through the ground, converges towards the Lavington, and on the opposite side of the gully all developments so far have failed to find any extension of it owing to the deep overburden, the results of slips from the steep gully which it crosses at a long angle. Near where these lodes converge the Lavington has an apparent width on the surface of about 65 feet. This large body is not all quartz so far as can be seen in trenching, but several strong ribs of quartz traversing the sandstone. At the point of apparent junction the Argall lode in like manner widens out to a large size being here about 40 feet in width. Having determined the actual position of these lodes it has become necessary to develop them by driving, and for this purpose Mr. E. P. Adams is now engaged laying off levels. There will be but little difficulty in reaching the lodes, but the thorough exploitation of such immense bodies of ore will necessarily take a long time, as in the adjoining mine, the Komata Reefs. This, however, I have no doubt will, in like manner, discover rich chutes of ore, the country being all that could be desired. From the low level now being laid off, back to the depth of over 300 feet will be available, while an aerial train down Graydon's Creek will junction with the Komata Reefs tramroad at a good working gradient. The further dealing with the ore as to its destination and treatment will require the consideration of the directors in consultation with Mr. W. H. Argall.

NEW HAURAKI GOLD PROPERTIES.—The manager reports under date July 29: Herewith I beg to hand you my monthly report for the four weeks ending 25th inst.—South Tokatea rise above deep level. This has been rising and securely timbered 44 feet for the month, total distance 100 feet. We calculate another 20 feet before a communication can be effected with the South Tokatea winze. The reef is precisely characteristic to the reef followed down in the winze, widening out at times to 15 inches of quartz formation. The country rock is a pale blue andesite thoroughly mineralized, and altogether very congenial for gold.—South Tokatea winze. This winze was suspended early in the month at a depth of 87 feet. After making a communication with these two points we propose to open out an intermediate level also, with the ventilation we shall have to the north from the deep level. Deep level east and west reef. This level is now extended 84 feet by two men having driven for the month 22 feet. The reef is of the same character as have been throughout. The country rock in the end is now undergoing a change. Hitherto our rock has been much oxidized in iron. This now seems to be disappearing, and a blue tuffaceous rock taking its place. I am of opinion our reef will now undergo a change for the better.—Nichols' rise. We are rising here to communicate to the winze being sunk below Nichols' level. The distance risen has been 36 feet. We require to rise 21 feet more to effect communication. The reef is 15 inches wide, good quality, going down nearly vertical.—Nichols' winze. This winze is sunk to a depth of 49½ feet in hard country. The reef in the winze is 6 inches wide, bearing solid quartz. As soon as communication is effected here we shall develop Nichols' reef from the low level with all speed.—Queen reef crosscut. We have driven this crosscut in all 207 feet. The country rock being passed through is all that can be desired. We have 220 feet to intersect South Tokatea reef. Prospecting west crosscut is now in 137 feet, 14 feet having been driven for the month by four men. The country rock here is extremely hard, rendering progress slow.—Timber. Our timbermen have supplied 415 logs, 374 taps, 109 slabs, and 150 sleepers. In conclusion, I hope my next to have communications effected in the Tokatea section and Nichols' section, and place all our men to open out levels on those reefs. It is true in both places we are rising and sinking in line of reef, but unfortunately we have met nothing of importance. At the same time, in extending our levels longitudinally strikes of gold may be met with, which would give us a basis to follow their run for future developments.

PRESENE'S POINT PROPRIETARY.—The agent's report under date July 25: We beg to hand you the following report for the four weeks ending July 25:—Engine shaft. Four men have been engaged in the timbering and preparing the shaft for the pumping gear. In order to strengthen the collar of the shaft, which had been somewhat weakened by the excess of surface water, we have had to put in several sets of timber, which have made the shaft perfectly secure in every way, and in my opinion will remain so for years. The water has risen almost up to the adit level, and as soon as the pump is in working order it will soon be reduced to its normal level. At present the water is being pumped to carry the drawing lift column. We shall lower this in the next few days. The material for cage roads is on the ground, and the road will be complete to adit level as soon as the pumping gear is ready to start, which we anticipate will be before this reaches you.—Erection of machinery. This work has been carried on with all possible speed, and at the time of writing the pumping engine is completed and the winding engine nearly so. All the framework of the building to cover the machinery has been built, and the next day or two will see the building covered in. The boiler and the rollers have been finished, and the foundations of the smoke stack will be completed during the next week. The poppet legs are also being constructed, and very little time will be required to get them into position. So far as can be seen at present the pumping and winding machinery, together with the boilers, should give every satisfaction, and when in working order will constitute the best plant of its size in the district.—Surface work. This has included getting the machinery into position for the stiers, and bringing up material for the bricklayers' work on the boilers. A drive has been put in 82 feet in order to draw the ore from the stiers to the pumping engine, also to unwater the balance pit. In this drive a leader was cut about 4 inches wide, which has every appearance of being a true fissure vein, and we are sending samples for assay. Very little prospecting has been carried on. In consequence of the hands being engaged in work connected with the machinery, but very soon men will be free to carry on this work. A little prospecting work was carried on early in the month, and the indications met with were very favourable. A reef about 8 inches thick was cut, being of solid quartz of a very likely character for gold. The bigging and store rooms have been kept busy in preparing material required for the machinery and poppet legs. The mine carpenter has had his time fully occupied in making preparations for the expected speedy resumption of mining work.

KATHLEEN CROWN.—The agent reports under date July 25: We beg to hand you the report for the four weeks ending as above.—Engine shaft. This has been sunk 17 feet during the month by 12 men, making the total depth 76 feet. The country rock is still hard andesite. Water has continued to flow in so fast that we deemed it wise to suspend operations in this direction, and turn our attention to the adit level with the object of intersecting the shaft workings, and thus form an outlet for the water. We shall then be able to resume sinking.—Adit level. At present this level is in 74 feet, and another 15 feet should see us through to the shaft, when we propose cutting a chamber, and hoisting from the bottom of the shaft to this level. We then hope to be able to sink the shaft another 60 feet before we are again troubled with the water. During the driving nothing of note has been encountered, the country being the same as that met with in the shaft sinking.—Surface work. We propose doing some surface prospecting, employing those who were engaged in the engine shaft, which we believe will tend to develop the resources of the mine, and enhance the value of your property. The office stores room are being enhanced as quickly as possible, and rock making has been continued, but under very disadvantageous circumstances, on account of the heavy floods rendering the ground very treacherous.

SUCCESS GOLD MINES.—The manager reports under date July 25: I beg to hand you the following monthly report for the four weeks ending 25th inst.:—Big reef crosscut. At a point 556 feet in this crosscut we intersected James' reef, which is 130 feet below James' level. The reef is bearing 10½ north of east, with an average depth (i.e. the leader part) of 4 inches, while the for-

mation of reef from wall to wall is 4 feet. The matrix of the reef consists of quartz cemented together by the oxidation with iron. The reef looks very healthy, at the same time we have not yet seen any gold in it. We have driven westerly a distance of 24 feet. East of one shaft we drove 6 feet. In this direction our slide, being north to south and underlying west. This particular slide we can trace in James' level, and in that level the slide was met with east of the runs of gold. Seeing this we are driving westerly in our deep level as fast as possible, predicting that the runs of gold if they carry down, which there is no reason to doubt, will be discovered considerably west. In order to be prepared for ventilating this section of ground, instead of resuming the two winzes abandoned on account of water below James' level, we have initiated sinking a new winze; and we are cutting winze plot preparatory. The position of this said winze is 70 feet west from James' level crosscut, where the reef carried colours of gold in the sole of the level. We have to push on westerly on James' a drive of 141 feet. At this point we shall rise to the winze referred to. This should open up a large section of ground.—James' east end. The reef in this level during the month has assumed an improved appearance, being now 6 inches wide, carrying very congenial quartz. In this direction we expect to meet the junction of Success No. 1 reef. The country rock is hard rendering progress slow. Total distance from James' crosscut to our new winze 127 feet.—James' east stop on No. 2 rise. We have sloped here 23 feet long and 30 feet high. During the month this slope produced some good picked stones of gold.—James' west stop between No. 2 rise and James' level crosscut. This is now sloped out to the intermediate level 45 feet long and 35 feet high. This slope has been disappointing, yielding low grade ores.—James' east stop above intermediate level. We have opened a slope here 15 feet in length, the reef in which is small and disordered, carrying occasional colours of gold.—James' west stop above MacDonald's level. We have opened a slope here 31 feet long. The quartz raised here carries good prospects of gold.—James' intermediate rise. We have put up a rise here for the month 50 feet, and opened up a block 80 feet long to James' No. 3 rise.—Success No. 2 south. The reef in this end has taken a considerable turn westerly, and if it continues will soon junction with Success intermediate reef, at which point we are hopeful of discovering gold.—Success intermediate reef. We have driven this end south for month 24 feet. There is no change to report in this level. The amount of crushing dirt broken for the month is about 20 tons. The approximate value I estimate about 1 ounce of gold to the ton.—Stamps. The contractors have got all their machinery delivered on the ground, and are pushing on to complete the erection thereof. The roads from the township to the mine are practically almost impassable owing to the severe weather we have had. The County Council will now repair the roads, which will take some time. With this done the company will have to cart coals to the battery site before any stamping can be done. There is no help for the machinery being delayed, consequent on having a new road to contend with, and this being unlike summer time. We are doing our best under the circumstances, and in the meantime opening out our battery or deep level westward as fast as possible.

TARARU CREEK.—The acting manager reports under date August 7: During the four weeks ending to-day work on the California reef has been confined chiefly to sloping above the low and intermediate levels. Above the former three slopes are now being carried along. The reef varies from 2 feet to 8 feet in thickness, and the ore is of good grade. The slopes above the intermediate east and west of the rise are also producing a good supply of crushing dirt. The drive on the Day Dawn reef has been extended 12 feet, making the total distance driven on the line of reef 299 feet. The lode is 3 feet in thickness, and colours of gold are seen in each breaking down. Two slopes are in progress over this level, where reef averages 2 feet 6 inches in width, and is of a fair grade. The intermediate on the same level has advanced 12 feet, making the total distance driven at this level 232 feet. The reef in the eastern face is 2 feet in thickness, and by dish process gives fair prospects of free gold. Above this level sloping is being continued as usual, with fair results. The drive west of the crosscut on the City of Dunedin reef at the low level has been extended 30 feet, making the total distance driven 617 feet. Considerable improvement has been taken place here. The reef in the face shows a width of fully 6 feet, and strong colours of gold are seen in the stone. I would call attention to the fact that the ore from this drive seems especially suitable for the treatment by cyanide process, being very free from minerals. As the fully 253 feet of reef has been driven over this level the company will have a very extensive block upon which to operate. The eastern face on the same reef has been advanced 41 feet, making the total distance driven in this direction 176 feet. The lode in the face is fully 4 feet in thickness, but so far there is no improvement in the class of ore coming to hand. The drive on the main reef in the battery level has been extended 41 feet, making the total distance driven east of the crosscut 137 feet. We are still carrying the full width of the drive in the reef, but no payable ore has yet been met with in this direction. Cleaning up and retorting took place to-day. Estimating each load tipped into the battery to contain 10 dwts., we have crushed 380 tons of quartz for a return of 403 ounces of amalgam, which gives 145 ounces 11 dwts. of melted gold, valued at £193 8s. 9d. With the successful treatment of our ore and improvement of the road, which will enable us to bring howler loads, we shall be enabled to keep our 40 head of stamps going so long as there is plenty of water in the creek. During the past month the battery has been working on a shift of eight hours with 21 head of stamps. With the accession of the good ore in the western face of the Dunedin low level I have decided to increase the stamps, putting 10 more into commission. As I have observed, this ore in my opinion is eminently qualified for cyanide treatment, assuming we can succeed in getting the solution to percolate after wet crushing, in which I think we shall succeed. I have, therefore, had pits erected at the foot of the copper plates, into which the whole of the tailings will be deposited and hoisted once into one of the cyanide vats. I hope by this arrangement to keep one vat at this level at all times, which will allow right away and not require to run over the vanners, there being no mineral of value after leaching, and thus I shall have more time to run the other vat over the Lubrig vanners, which, as I have remarked before, are rather small for the purpose.

CHAPPEL.—The following report dated July 30 has been received from the company's managers, Messrs. F. Bowes Scott and Co.:—No. 1 shaft south drive. This drive has been advanced 14 feet, making a total of 93 feet. The vein stone is much broken up and mingled with country rock; in fact, it has been so much broken up that it is not possible to determine the true width of the vein. The drive is now 18 inches wide, and is being driven at a depth of 10 feet, making a total depth of 32 feet. Samples yield poor results. The progress is slow as the enclosing rock is very hard. Size of vein 15 inches. Pannings poor.—No. 4 shaft west crosscut. This crosscut has been extended 5 feet, making a total of 135 feet. Ground is hard and expensive. Pannings poor.—Machinery. This is being forwarded, and the necessary preparations for its use are in hand.

CLUTHA.—The manager reports under date August 5 that the average assay of the dump from the 200 feet level is 18 dwts. 10 grains.—O winze. The average assay from this for the last fortnight in July is 11 dwts. 14 grains.

CONSOLIDATED GOLD MINES OF WESTERN AUSTRALIA.—The directors have received the following manager's report upon their Yellow Aster and Golden King Mines at Towerana, North-West Australia, dated June 20:—Yellow Aster. The main underlay has been sunk 9 feet, making the total 65 feet. The lode continues strong. During the last few days stone carrying good gold has been started, and the drive to the north has been extended 16 feet driven. The lode is here disturbed by a large horse having come in, but is strong underfoot, the vein carrying a quantity of galena. I purpose next week driving to the south-eastward on this level, the lode appearing strong in this direction and carrying good gold.—Golden King Extended. The three months' exemption on the lease expires on Monday, 2nd inst. The directors have decided to extend the lease for three months. Application has been made to the Warden for the exemption from work on the Golden King Extended for six months for the purpose of concentrating the labour on the Golden King. I purpose sinking No. 4 shaft as No. 5, and thence driving along the lode south-west, also to cut down the deep well shaft and prepare it for a battery well and working shaft. Dimensions of this shaft to be 9 feet 6 inches and 3 feet 6 inches in the clear. This shaft is intended to be timbered down to 110 feet. Application has also been made for an exemption from the lease for three months for the purpose of concentrating the labour if required on the Yellow Aster.

HANNA'S LODGE.—The following report, dated August 1, has been received from the company's mine managers, Messrs. O. J. McCulloch and Co. Kalgoorlie:—During the fortnight No. 1 shaft has been sunk a further depth of 15 feet to the 100 feet level. A crosscut has been commenced to connect with No. 3 shaft, and has been driven 17 feet. At this distance an ironstone formation has been met with, but has not yet been driven into. The country rock is very good. No. 2 shaft has been sunk a further depth of 19 feet, a soft seam of decomposed schist, with numerous quartz veins, has just been passed through. The country now becoming highly oxidized. No. 2 shaft has been logged up and windlass erected. The shaft is now sunk to a depth of 19 feet through schist formation.

HANNA'S REWARD.—Extract from the manager's letter, dated August 4: South drive on main lode has been driven 13 feet, total from No. 5 reef drive 61 feet 6 inches. This drive is in splendid looking ore, but is very poor—viz., 3 to 10 dwts. North drive on main lode has been driven 1 foot from No. 11 drive out. The ore is exceedingly poor, no samples showing more than traces. No. 2 level south drive has been extended a further 13 feet 5 inches, making a total of 77 feet. This drive is opening up a fine looking body of ore, but it is very low grade, showing only traces of free gold, while the fire assay is only 5 dwts. per ton.—No. 3 level. The water since ceasing operations has risen 5 feet on the pit, which I calculated is equal to 36,000 gallons or 45,000 gallons daily. Water shaft has been started about 800 feet of the main shaft, and is now down 25 feet, and timbered to the surface. I should like to know as early as possible your intentions with regard to a heavy winding plant for the main shaft, for if you intend sending one, I can utilize the present one in the water shaft, and if not I shall have to get some horses and put up a whip.

LADY MARGARET.—In letters dated August 4 the managers write:—The reef in the south-west shaft mentioned in my last is proved to be 15 feet wide, and should go to at least an ounce to the ton, which to say the least is a valuable body of ore. Since writing you my official letter the mine manager has called with the result of the bulk assay from the 15 feet reef, which shows the very handsome return of 2 ounces 5 dwts.

#### MISCELLANEOUS.

ANGLO-MEXICAN.—The following is an extract from the mine report, dated August 1: New main tunnel. Very satisfactory progress has been made in this work. We are still following footwall of vein in order to facilitate the arrangements of ore chutes.—New main shaft. The vein cut in the roof of shaft assays £112 per ton, and has a very encouraging appearance.—Stopes. In overhand stopes on vein 80 feet from face of main tunnel we have found high-grade ore, which will in all probability prove to be extensive below the main tunnel level. We have found the vein beyond what is called stopes No. 16, 17,

Guadalupe level. At this place the vein had apparently pinched out, and the Guadalupe tunnel from here on followed a stringer, leaving the vein hanging wall. The vein was 10 to 15 feet thick. I am very much encouraged over this discovery, and will keep you fully informed in regard to this important development. The stopes above No. 2 and 3 levels are looking well, but are nearing the surface. We are getting all our work in the mine in good shape, doing everything in a miner-like way, are cleaning the ore in the stopes and on the dumps, and after taking out all the ore left in filling and hanging wall vein between levels Nos. 1 and 3, we expect to be able to reduce expenses materially. I will state that the general appearance of the mine is encouraging.

BIENFAYES GOLD.—The following report has been received from the mine dated August 20, September 7: The Rising shaft is still sinking in easy ground, but as yet has not cut into main lode. The 500 north level carries fine looking lode, with quartz 2 feet wide, well mineralized. Some stopes showing coarse gold were broken here on Friday last. I have sent men to stopes in back of 400 north level; the quartz at this point is 2 feet in width, and carries a large quantity of galena and copper pyrites. Visible gold in stopes, being met with. The 200 south level shows a strong quartz lode, but little mineral and assay values run low. The quartz in the 150 north level is much better quality, contains galena, and has shown assay values as high as 13 dwts. gold per ton. The 80 north is without material change since last writing. All other workings are without alteration.

GREAT BUNINYONG ESTATE.—Total depth of alluvial shaft sunk should be 230 feet, instead of 130 feet as previously reported.

MAY CONSOLIDATED.—Report for the month of July:—Battery. 10 stamps ran 21 days, crushing 10,750 tons. Gold won 3520.7 ounces (average 5.55 dwts. per ton), valued at 77s. 6d. per ounce £21,762 10s. 9d.—Cyanide works. Siemens' process. 6000 tons tailings treated, gold won 1220 ounces bullion, equal to (say) 9½ ounces fine gold (average 3.93 dwts. fine gold per ton) at 80s. per ounce, £2687. Other receipts £18, total £2705 13s. 11d.—Working costs (10,750 tons). Mining cost £2737 3s. 8d., equal to 1s. 4½d. per ton. Development cost £1495 2s. 3d., equal to 2s. 9½d. per ton. Treating cost £260 13s. 8d., equal to 4½d. per ton. Crushing and sorting cost £236 9s. 9d., equal to 2s. 6d. per ton. Milling cost £2747 7s. 11d., equal to 1s. 13½d. per ton. Total £21,566 13s. 5d., equal to 21s. 4½d. per ton. Siemens' process 6000 tons, cost £236 8s. 4d., equal to 3s. 4½d. per ton. Total £21,553 13s. 9d., profit £2915 6s.—Expenditure on capital account. Construction, &c., £278 19s. 5d.—Note. Owing to the Netherlands Railway Company failing to cope with the largely increased traffic, operations were again restricted through shortness of coal supply, and the battery ran only 24 days; from this cause also, as well as on account of alterations being effected in the precipitation boxes, the cyanide works, from which the greater portion of the profit is derived, treated 2000 tons less than last month. The coal difficulty is now being overcome.

MOUNT CHARLOTTE.—Manager's mail report of July 31 states: Man's shaft sunk in all 232 feet. Water to-day making at rate of 12 6 gallons per 24 hours (800 gallons per last report). The country rock is now showing very much the same as at the same depth in Hannan's Reward Mine. The diorite is gradually giving place to quartz at present in the bottom of the shaft and is looking more hopeful.

PESTARENA.—The following report has been received: The 31 and 40 levels are producing 1 ton of ore per fathom at 1 ounce. The 45 level is producing 1 ton of ore per fathom at 1 ounce. The 46 level is now yielding 1 ton of ore per fathom at 1 ounce. An improvement having occurred sooner than was anticipated. At 5½ fathoms out from No. 2 lode a change has occurred in the nature of the rock, and it is hoped the No. 1 lode will very shortly be cut. In the 55 crosscut payable quartz showing pyrites are frequently met with, but no regular branches have been intersected.—Stopes. At the 48 east on counter lode a stopes yields 1 ton per fathom at 1 ounce.—No. 1 lode. Two stopes at the 46 east yield 4 tons at 1 ounce 10 dwts. and 1 ton at 2 ounces respectively. Two at the 45 east yield 4 tons at 1 ounce 10 dwts. and 1 ton at 2 ounces respectively. At the 44 east there are two stopes yielding respectively 5 tons at 2 ounces 10 dwts. and 9 tons at 2 ounces. At the 30 east one stopes yields 5 tons at 1 ounce. At the 20 east on A. and B. lodes gives 2 tons per fathom at 1 ounce.—Stabioli. In the end north from Morghen crosscut a small branch of pyrites, which has an exceedingly promising appearance, has just been met with on the hanging wall, but the width of the lode is unknown, as it is too wide to carry both walls. The crosscut west has been resumed for further exploratory purposes.—Kint. On the Oro Seme lode the appearance of the lode is promising. The end east on Dupoula lode has during the past month been producing at the rate of 2 tons per fathom, giving by assay 1 ounce 2 ounces 8 dwts. per ton. The lode in the winze under Quaraxa adit is yielding 3 tons per fathom at 1 ounce, and is carrying 15 centimetres of pyrites extending the whole length of the winze.—Val Toppa. At the Carbonates and east lode the lode has been disturbed, but is now more compact, and carries a large quantity of galena and pyrites. The east end from bottom of winze is producing 1½ tons per fathom at 9 dwts.—Gold return. The ore from the Argall level is entirely due to several mills having been worn through, which prevented the usual quantity of ore being milled. The quality was maintained. Machinery continues to work satisfactorily.

TASMANIAN EXPLORATION, NEW GOLDEN GATE EXTENDED.—Letter received from the mine manager at Hobart, dated July 26, states that much better progress has been made this week. The contractors have sunk the main shaft a further depth of 7 feet, making a total of 240 feet from surface. We are now passing through the bottom of a shaft reef formation about 2 feet 6 inches wide, carrying two strong branches of very pure quartz stone, showing a little galena, but no free gold. This reef course is underlying 2 in 6 to the west. These discoveries I consider very promising indeed. The slate in bottom of shaft is much cleaner, and, if it keeps so, much better progress will be made.

YALGOO PUBLIC BATTERY.—The following report, dated August 6, has been received from the company's managers, Messrs. F. Bowes Scott and Co. Melbourne:—Glad Tidings. Have secured the 10th month's redemption this week. I have removed the men employed there for the present, and on Monday have started sinking the engine shaft, working three shifts on each side, and a date have sunk a distance of 17 feet. I have also placed a frame set on a roller and logged up and placed a windlass in position. If the ground continues at present I should reach water level in a month from date.—Underlay shaft. The drive from the underlay shaft east along the course of the lode has been extended 5 feet, total 11 feet. This has been stopped for the present, the men now being employed on the engine shaft. I have started another drive on the west side of the lode, and have driven 14 feet during the month. The reef in this drive is showing a strong and very promising lode, rising from 3 to 4 feet; very good prospects are being doled from same, and I find that it is richest at water level.—Western lode. The western lode shaft has been stopped for the present at a depth of 30 feet. The engine shaft is 11 feet 4 inches by 3 feet 6 inches, and one 4 feet 4 inches by 3 feet 6 inches. The last will be the pumping shaft, and also the ladder road.

CARIBBOO HYDRAULIC.—The managing director of the company telegraphs that the clean up of the Caribboo Hydraulic Company for 25 days amounts to \$11,500, or over £8,000. The Caribboo Hydraulic Company is engaged in hydraulic mining a portion of the banks of the south fork of the Quenele River, and are at present only employing 300 miners (about 200 men). This return, therefore, represents an average of over \$1 to the cubic yard of gravel, which is almost unprecedented, and should confirm the expectation held as to the wealth contained in the bed of the south fork of the Quenele River, which has eroded these banks.

FLAGSTAFF.—This company has received a report from their manager Coolidge as follows:—August 5: The average width of the main reef is 12 feet, and taking it straight it will average 3 ounces of precious metal to the ton of surface. The ore is now passing through the mill. A large quantity of ore has been taken out of the lode, and have driven 14 feet during the month. The reef in this drive is showing a strong and very promising lode, rising from 3 to 4 feet; very good prospects are being doled from same, and I find that it is richest at water level.—Western lode. The western lode shaft has been stopped for the present at a depth of 30 feet. The engine shaft is 11 feet 4 inches by 3 feet 6 inches, and one 4 feet 4 inches by 3 feet 6 inches. The last will be the pumping shaft, and also the ladder road.

HARQUAHUA (Arizona).—Copy of report for the month of July:—Cyanide plant department. The amount treated and the returns are as follows:—Table of work. 4229 tons. Average assay of pulp 60 dwts. per ton. Average assay of tailings \$1.17 per ton. Percentage extracted according to assays 65 per cent. Bullion estimated to yield \$493.00. The plant was running during the month a total of 23 days.—Milling department. Ten stamping machines 12 hours per day were operated for 23 days on Bonanza lodes ore. The tonnage crushed and the returns are as follows:—Table of mill work. 4229 tons. Average assay of ore \$16 12 per ton. Average assay of tailings \$3.98 per ton. Percentage extracted according to assays 74 per cent. Bullion estimated to yield \$527.31.—Summary of revenue and expenses. Revenue from cyanide plant \$493.00. Percentage obtained from leasers' ore and milling same at 95 per cent \$227.23. Miscellaneous \$9.81. Total revenue \$777.03. Operating expenses \$19.02. Miscellaneous expenses \$159.75. Total expenses \$659.97.—\$1161.11. Profit at \$1.90 equals £237.

WHEELER HILL.—Mr. Francis H. Hill, superintendent, writes from Chinese Camp, California:—The new tunnel is now in 250 feet, and is being driven to the ledge, with no hanging wall yet. The rock looks fine, and I should like to see the company's report on the ledge at least 200 feet, and would recommend the company to sink a shaft of 825 in gold per ton of 2000 tons from the small 12-inch ledge, which looks well.—August 10: 1 ounce assay from the large ledge (\$3.17, \$3.67, \$3.33 in gold). The drill is taking a very good ledge, the other two are taken about 20 feet from there, and any idea of selection, as it cannot be selected, as it looks all alike. One of the finest ledges in Wheeler Hill that I have ever seen. It is at least 15 feet wide, mineralised all through.

NEW PRIMOSE.—Monthly report for July.—MILL. An average of 160 stamps ran 27 days, crushing 22,871 tons of ore, yielding 6515 6 ounces of melted gold, at a cost of £22,591 16s. 9d. per ton. Milling, mining, and general charges, including development, 19s. 9-07d. per ton.—Cyanide. About 13,991 tons of tailings treated, yielded 4083.3 ounces of melted gold. Cost, £2770 9s. 2d. per ton.—Mine. Risen 104 feet, driven 530 feet, total 634 feet—822 feet, developing 21,635 tons of ore.—Financial. The cost of working for the month has been £26,362 5s. 11d., leaving a profit of £10,307 1s.—E. Brayshaw, managing director, T. Anderson, general manager.

SPITZKOP FARM.—In reply to numerous enquiries from shareholders the directors state that the present difficulties of transport in the Lydenburg district are not interfering with the work at the mine, the company having a sufficient supply of food and other necessities for another six months. The latest advices from the mine are that everything is going right, and that the mill is still working at full time. The additional stamps will be erected as soon as preparations are made.

The IVANHOE GOLD MINING COMPANY are advised, by cable from Melbourne, of the declaration of a dividend of 2s. 6d. per share, payable on September 28, and notify that the transfer books will be closed on September 18.



## AUSTRALIAN AND NEW ZEALAND.

**AUSTRALIAN MINING.**—Fortnightly report of Mr. John James, manager, dated July 30:—During the past fortnight the shaft has been sunk 20 feet, total 955 feet. Total timbered 941 feet from the 20 feet level to the 100 feet level. The sinking has been through fine-grained grey conglomerate, good sandstone, and has been in a hard, breaking, but not too hard, ground, but had to break through a few thin layers of shale. At the 100 feet level the country was hard conglomerate and very hard breaking ground; but there is a change coming in and a good head in the face running the course of the reef. This is the first head we have had running the right course since the last four weeks. Everything about the mine and winding plant is in good working order.

**BRITISH BROKEN PROPRIETARY.**—Mining manager's report for the week ending July 30: Blackwood shaft, 50 feet level. In cleaning up we have taken 25 tons lead carbonate ore, 100 feet level. The northern faces obtained 25 tons lead carbonate ore, and the eastern vein slopes are yielding small quantities of good lead ore. The tributaries working just above this level yielded 70 tons, and those below 524 tons. Howell shaft, Far North level, 100 feet level. The country is hard conglomerate and very hard breaking ground. The southern and western faces in this slope both above and below the 100 feet level are looking well, and produced good supplies of ore for the mill. We mined 600 tons carbonate ore from this slope, the whole of which was hoisted during the week 1157 tons carbonate ore, of the whole of which was sent to the mill, assaying 30.6 per cent. lead and 4380 ounces of silver. Surface. Have nearly finished laying tramroad from mill tailings tram line to tunnel near Howell shaft, which will be used for trucking tailings into the mine. Good progress made on concentrates, platforms, and erection of mine boulders. Week's assays, carbonate ore, Lead from 20 to 67 per cent. silver from 14 to 27.9 ounces per ton.

**BAYLEY'S No. 2 SOUTH.**—The following fortnightly report, dated August 5:—The mine manager, Mr. W. M. Vivian:—In the winze the 100 feet level 4 feet has been sunk, making the total depth 32 feet. The width of the reef is 1 inch. At the 100 feet level south 8 feet has been driven, making the total distance 6 feet from the crosscut 65 feet. The reef has widened out to 14 inches wide, but only gives traces of gold.

**BAGLEY'S No. 200 (claims, Barberton).**—Under date August 14, Mr. J. W. Bagley, the manager (formerly of the Gold Mining Company) reports that he considers the property a valuable one, and that he has traced the gold to the development of the Moonstone and Homestake reefs, which are opening up very well, and that all the ore extracted is being stacked for future treatment. These reefs maintain their width, and by pan prospect very well. A new reef about 6 feet wide has been found near Block 13. The manager considers the time has arrived when the matter of erecting a mill should receive the attention of the board. The board are now taking steps to carry out the manager's suggestions.

**CRESCENT GOLD.**—Superintendent's report for fortnight ending July 31:—Ore. Mine. Rise at back of drive north of tunnel B on hanging wall of level advanced 18 feet, total 83 feet. Crosscut west from top of Crescent mine rise towards winze on auriferous vein below tunnel A advanced 10 feet. The winze should be reached during the coming week, and we shall then be in a position to crush Crescent stone. Victory Mine. Extension of tunnel B towards western level advanced 18 feet, total 387 feet. The influx of water is daily increasing, and the rock continues to be traversed by numerous small veins. Winze on main level below drive south of tunnel E sunk 11 feet, total 22 feet. A vein of quartz has just been reached, which shows a little gold. We are daily expecting an improvement here. The stope above tunnel E are becoming exhausted, although we still have a fair quantity of payable stone above tunnel F. It therefore behoves us to expedite the sinking of shaft below E in order to open up fresh reserves. We have commenced an underground stope north of the shaft, where the level is 2 feet wide, and carries visible gold. Drive south of tunnel on Howard's level advanced 10 feet, total 197 feet. Lode small and poor. We have commenced a new drive in order to intersect the parallel lodes showing at the surface. Orlando Mine. Drive south of tunnel F towards main shoot advanced 18 feet, total 98 feet. We should soon reach the north end of the auriferous shoot.

**CONSOLIDATED MURCHISON GOLD MINES.**—Extract from mine manager's report dated August 3: The cyanide plant is now working very steadily with first-class results. We have now put through 15 charges of cyanide per week. When we have a stock of chemicals we can increase our output considerably. I still consider us to be in the experimental stage. As it is now we can fill, leach, precipitate and empty a vat of 50 tons in 40 hours. Our extraction averages 90 per cent. For a vat containing 50 tons the consumption of chemicals now is 16 lbs. cyanide of potassium, 5 lbs. bromide of cyanogen, and 13 lbs. of lime.

**CONTINENTAL AND WESTERN AUSTRALIAN TRUST.**—Major King. The mine manager reports that the mine is looking well, and that the reef is at least 3 feet wide. Driving is being proceeded with, and ore will be put in later on. Maitland lease. According to mail advices this property is opening up splendidly, a reef about 2 feet wide having been struck at right angles to the old one. The reef is very solid, and excellent results were obtained by doling.

**CHAMPION REEF (Nannine, W.A.).**—Mine report for fortnight ending August 1:—Plant. A large portion of the Otis machinery has arrived, while a few loads only of the Fraser and Chalmers' plant has been delivered. A commencement has been made with building machinery for the pumps and winding plant, and am most hopeful of pushing on the erection without interruption. McKillop is making the necessary excavations for foundations for the battery, &c. Every attention will be given to forward the mill construction. Mining. Development is now restricted to extending the south drift from D and H shafts. The former has been driven 12 feet for the fortnight, total length 90 feet. A tramroad has been laid in this drive from shaft to face, thus facilitating removal of material. The drift from H shaft south since starting, has been 16 feet, total 68 feet. The reef in both drives is undetermined, but is large, especially to south of H, where good stone is being extracted. Stone in drive south of D is of usual grade. The majority of men employed are at surface in connection with machinery erection.

**HART MURCHISON UNITED.**—Extracts from mine manager's report, dated July 11: Underground works. Great Eastern Consols. Dundas's drift; this shaft has reached a depth of 107 feet, at which depth a large body of water was met with. The crosscut north has been advanced 13 feet, and is now 15 feet wide. The country is hard conglomerate, and is very hard breaking, but not too hard, ground, but had to break through a few thin layers of shale. Since we started a crosscut has been driven from the bottom of A shaft on Great Eastern lease, which reveals a magnificent body of good ore 13 feet in width, with 1 ounce 8 dwts. gold per ton. Owing to wet weather considerable delay has occurred in building operations. With the exception of flues to stock, however, all necessary in connection with the boilers is completed. The large 600 gallon tank is completed and connections from same to battery are now being made. Bounding over battery has been commenced. Circular saw running constantly for past fortnight. Everything going well.

**HARRIETVILLE COMPANY.**—Superintendent's report for fortnight ending July 11:—Tiddies Mine. Bibby's Lode. Drive north of rise 5 feet above tunnel F advanced 20 feet, total 39 feet. Lode 13 inches wide, and valued at 1 ounce of gold per ton. Rise at back of same level advanced 21 feet, total 41 feet. This rise has now communicated to upper workings. About 75 tons of stone from this lode is now being trucked to the mill, and we commence crushing tomorrow. Bine, Bernard Mine. Drive north of Pennsylvania shaft towards auriferous vein advanced 15 feet; total, 56 feet. Only two men are employed here.

**HAMPION PLAINS EXPLORATION.**—Mine manager's report on Block 39, July 25: Started new shaft, sunk 7 feet. Have two sets in, and timbered ready for logging. There has been only one shift of two men employed sinking the remainder have been cutting timber.

**LAUREL.**—Copy of report for the month of July:—Main shaft. The west crosscut has been advanced 20 feet, total 424 feet, which carries it to the level of the 100 feet level. About 175 feet from the shaft, 10 feet has been driven on quartz stringers crossed at that point. Traces to 3 dwts. of gold have been found in this. The east crosscut has been advanced 65 feet, a total of 100 feet. At 250 feet a quartz vein 12 inches wide was cut, on which a drift was run 61 feet to the north-east. The vein continued 3 to 6 inches wide, and showed a few pennyweights per ton in places. At 80 feet from the shaft a drift is being run on a band of stringers to the north-east. This has been opened 15 feet, and traces of gold have been found. Dodd's shaft. At the bottom of the shaft 150 feet deep a crosscut was run 15 feet to the south, where the quartz vein opened above was cut. A short drift was run on the side vein, which was about 8 inches wide, but no gold was found. The character of the vein in the hard dolomite was very unpromising. A crosscut was also run 20 feet to the north, but nothing was encountered. Harvey's shaft. The east crosscut has been advanced 112 feet, a total of 287 feet. A few quartz stringers have been passed through, and at the intersection of some of these traces of gold have been found. The west crosscut has been driven 61 feet to a distance of 276 feet, which carries it to the side line. A drift is now being run on this at a point where some gold was found, the side line. The stringers encountered in this and in the main shaft will be reported further. Work in Dodd's shaft has been suspended. Expenses. The expenditure for the month has been as follows:—Labour £250, supplies £150—£400.

**LADY MAUDE.**—The manager under date of August 5 reports as follows:—Work done for the past week. Surprise main shaft. The crosscut has been extended 9 feet, making a total of 40 feet. Several small veins have been passed through. From my measurements I should touch the main reef at about 47 feet. On Saturday I opened the tenders, and let the contract the company finding the contractor finding all his tools, explosives, and candles. This will be a saving of £213 per week; besides, I shall have the shaft sunk in water much quicker. Maude main shaft has been sunk a further 40 feet, making a total of 125 feet. The country is full of small quartz veins, and about 40 gallons of water are lifted each shift. When Government has granted a general exemption for to-morrow and Saturday, I shall be able to drive down the mine to-night, and resume work on Monday. In addition to the main shaft I intend to put on a couple of men to pick up the drift shown on plan coming in by the western boundary of Surprise section. I have, however, one and the same lode as discovered in the Friendship North ground.

**LEONARDY GOLD.**—Manager reports for week ended August 1: Vertical shaft 120 feet level extended north 9 feet 8 inches, total 91 feet 8 inches. Lode now of good freely. Main underground shaft sunk 15 feet 7 inches, total 111 feet. Am sinking under the lode, therefore am unable to give its nature. Poppet shaft is being taken out. As shown in previous reports, the mine is opening out level we should have enough stopping ground opened to last our mill for nine months at least.

**LENNON.**—Manager's report states:—Lease 1453. Shaft centred and cased in ready to resume sinking with two shafts. Pumping gear working very

well. The Ethel-Hope Company's machinery is now ready to commence milling and to operate on our ore. I may mention that they will not be able to continue work until the shed now in course of erection over machinery is completed. It is necessary the shed should be erected by the 15th inst. We are doing our best to keep the stone clean both from the Big Blow and the Old. In order to get fair crushings, which should help pay expenses in developing the mine.

**LONDON AND WESTERN AUSTRALIAN EXPLORATION.**—Morty's Mine, Mount Sir Samuel. Mine manager reports: Hansen's shaft is down 8 feet, logged and timbered. The reef here is 2 feet wide and carries really good gold from the surface. This gold is the best I have seen on the mine and is both coarse and fine. The coarse gold is in the solid stone. The reef is of usual ironstone and quartz peculiar to this line. I estimate the stone at 2 ounces 10 dwts. On the Lady Franklin lease at Pindinni a drive has been put in 6 feet at the 38 feet level. The reef is here 2 feet wide and well mineralised.

**MOUNT LYELL.**—Engineer in charge of mine reports for week ending July 24: No. 1 tunnel, north drive. Distance driven for week 7 feet, total 37 feet. No. 3 tunnel, main crosscut. Distance driven for week 7 feet, total 37 feet. No. 4 tunnel, south drive. Distance driven for week 4 feet, total 235 feet. Machine drill has been working in this face during the week. No. 4 tunnel, south drive. No. 3 crosscut. Distance driven for week 3 feet, total 57 feet. No. 4 tunnel, south drive. No. 2 rise. Stopping carried on during the week. No. 4 tunnel, south drive. No. 2 rise. Stopping carried on during the week. Surface work. No. 1 bench. Excavation of working face in the ore and removal of overburden has been carried on during the week. No. 2 bench. Ore has been broken in this face and sent to smelters. No. 2 1/2 bench. Removal of overburden has been carried on during the week. By wire, July 21: No. 3 tunnel, main crosscut. Reached schist, which appears to be hanging wall. Progress report for week ending July 24: Smelting plant. The capacity of the furnace from the east fork of Queen River has been enlarged to meet heavy requirements for water and various minor works have been put in to facilitate handling of materials. The whole plant is working splendidly. The first consignment by rail of coke was received on the 18th inst. with the completion of the playlating of the railway. The converter plant 40 feet main shaft erected, half the large main trusses 85 feet span raised and in place. Other framing and erecting progressing satisfactorily.

**MOUNT ZEEHAN (Tasmania).**—Manager reports for week ended July 28: Silver Queen section. No. 4 shaft has been sunk 5 feet, total below No. 2 level 50 feet. The ground is everything we could desire for carrying productive lodes. Concentrator has been engaged running on seconds from Zeehan Montana Company. Machinery at both mines working well.

**MYALL'S UNITED.**—Fortnightly report dated July 23:—Main vertical shaft sunk 6 feet 8 inches, and is now 245 feet 8 inches from surface. The ground is still very hard. No. 1 underlie shaft. Winze from No. 1 level sunk 11 feet, now down 71. A rise has been started from the stope above No. 3 level to meet it, and in the course of a day or two I hope to hole through. This will give us splendid ventilation in the stope, and enable us to easily get our mullock down to fill in same. The good shoot of stone left on the footwall in the winze will then be broken down, and judging from the prospects obtained from the drillings it shows good freely. In the stope an average of six men has been kept going, and about 25 tons of stone broken. Some of this stone is of good grade and shows coarse gold in places, but is 6 inches wide; however, we find a considerable quantity of low grade dirt in it, and this will account for the fact that our amalgam yield is considerably below that obtained for the same quantity of stone crushed during our last run. The crosscut from No. 1 to main shaft is now 46 feet from No. 3 level, and about 104 feet from shaft. This will connect the main shaft with the working on the lode at No. 3 level, and above same, and also prospect the ground between the two shafts. Reide's shaft. A drive has been started at the 158 feet level, and extended 10 feet. The lode here is 6 inches wide, and carries a little gold. The drive has still very hard. No. 1 underlie shaft. Winze from No. 1 level sunk 11 feet, now down 71. A rise has been started from the stope above No. 3 level to meet it, and in the course of a day or two I hope to hole through. 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log, and pumping, £1507 17s. 7d. Sorting and tramming, £231 1s. 11d. Reduction, £757 17s. 4d. General charges at mine and head office, £351 6s. 8d. Mine development redemption on 3513 tons at 6s. 6d., £2191 14s. 6d. Working expenses at cyanide works, £599 2s. 8d. Total, £3999 6s. 8d. Balance—profit for month, £1747 4s. 4d. Total, £2373 10s. 2d. Revenue, Mill gold, 1697 23 ounces at 74s., £2579 15s. 4d. Cyanide gold, 725 5 ounces at 60s., £2250 15s. Water rent and licenses £250. Total, £3774 5s. 6d. M.B. Ton revenues from water rents and licenses varying very much in each month, the average of the annual receipts under this heading has been adopted in this report.—Working costs per ton. Mining, hauling, and pumping on 3513 tons, 19s. 11 7/8d. Sorting and tramming, 1s. 10 1/2d. Reduction, 4s. 3 1/2d. General charges, 3s. 1 1/2d. Total, 3s. 7 1/2d. Mine development redemption, 6s. 6d. Cyanide works (on tonnage treated, 5s. 5 1/2d.), 3s. 11 1/2d. Total, 39s. 9 1/2d.—Total expenditure, Working expenses, £2939 0s. 8d. On capital account—for development, permanent works, £2574 15s. 16s. Machinery and plant, buildings, &c., £192 12s. 5d. Total, £3192 9s. 11d. Less amount redeemed from mine development on 3513 tons mined, at 6s. 6d., £2191 14s. 6d. Total, £1001 5s. 5d. ROBINSON GOLD.—The general manager's summary of operations of the company for July, together with statement of expenditure and revenue, as follows:—Mine. Quartz mined 15,600 tons.—Permanent works. Main incline shaft (west) sunk 62 feet, main incline shaft (east) sunk 61 feet, total 123 feet.—Development. Drives 477 feet, raises 363 feet, crosscuts 310 feet, total 1269 feet.—Main incline shaft (west). Sinking below the south level 62 feet.—Sixth level. Driving west on main reef 14 feet, raises 15 feet, crosscut 25 feet.—Seventh level. Driving east on main reef 47 feet, driving east on south reef 35 feet, raises 42 feet.—Eighth level. Raises 46 feet, crosscut 57 feet.—Ninth level. Driving west on main reef 39 feet, raises 6 feet.—Tenth level. Driving west on main reef 36 feet, driving east and west on south reef 81 feet.—Main incline shaft (east) sinking below the tenth level 61 feet.—Fifth level. Driving east on south reef 30 feet, raises 25 feet.—Sixth level. Driving west on main reef 38 feet, driving east on main reef 10 feet, driving west on south reef 11 feet, raises 10 feet, crosscut 27 feet.—Seventh level. Driving west on main reef 14 feet, raises 15 feet, crosscut 25 feet.—Eighth level. Driving east on main reef 47 feet, driving east on south reef 35 feet, raises 42 feet.—Ninth level. Driving east on main reef 43 feet, driving east and west on south reef 16 feet, raises 54 feet.—Tenth level. Driving east on main reef 12 feet, driving east on south reef 40 feet, crosscut 48 feet. Total 1269 feet.—Mill. Stamps at work 120. Net running time 23 1/2 days. Tons crushed 15,610. Tons per stamp per diem 46. Gold won from above 10,807 ounces 3 dwts.—Obliteration and cyanide works. Gold won from own concentrates (by chlorination) 825 ounces. Bullion from tailings (cyanide process) 3213 ounces 17 dwts. Bullion from slimes, Rand Central O. Recovery Company (Limited) 1424 ounces 12 dwts. Gold from concentrates purchased (by chlorination) 4485 ounces 3 dwts. Total 20,611 ounces 15 dwts. Crushed 15,600 tons.

Working Expenditure.			
Mining account (including mine maintenance) .....	£10,377 19 10	£13 3 66	
Milling account (including mill maintenance) .....	2,774 15 0	0 3 6 9	
General maintenance account .....	385 12 0	0 0 1 33	
General charges .....	1,099 2 0	0 1 4 91	
	£14,637 8 10	£18 9 19	
Expenditure on mine development (including main shafts) .....			
£4,40 10 8	0 5 2 16		
Retirement Account.			
Working expenses at cyanide and chlorination works .....	£2,363 3 2		
Cost of concentrates purchased (including receiving) .....	13,591 3 9		
	£15,954 6 11		
Profit for month .....			
	£23,511 3 8		
Revenue.			
Gold account (mill) 10,807 ounces 3 dwts. ....	£28,535 11 3		
Sundry revenue .....	290 0 0		
	£28,825 11 3		
Slimes plant account:—			
5800 tons slimes delivered .....	£121 1 10		
Company's share of profit .....	341 17 4		
	£154 28 14		
Retirement account:—			
Gold account (tailings) 3012 ounces 17 dwts. ....	10,003 0 0		
Gold account (own and purchased concentrates) 5387 ounces 3 dwts. ....	27,139 10 0		
	£37,142 10 0		
Fine amount received in excess of book entry for May and June gold .....	828 7 7		
	£37,970 7 7		

TRANSVAAL EXPLORING.—The directors report that they have acquired a 99 years' lease of the farm Jackalsfontein, consisting of 4800 acres, and a 25 years' lease, with the option of purchase, of the adjoining farm Korkfontein, which has an area of 1500 acres. These farms are in the coal bearing district of Middelburg. The following particulars of the property have been supplied to the directors:—Railway. The railway line runs within 400 yards of the farms, which slope gradually down towards the railway, so that the coal could be delivered by trucks from the pit's mouth, running down by gravitation, thereby doing away with the cost of haulage.—Coal. The farms lie among the nearest coal-bearing farms to Pretoria, and come within the radius of the low rate of traffic, the farms beyond it having to pay an extra rate of transport of 5s. per ton, which is in itself a handsome profit on coal. Coal between these farms and Pretoria, though nearer, pays the same rate of carriage. It is also most favourably situated for supplying Delagoa Bay and the rapidly rising mining district of Barberton. The cost of the Douglas Colliery and of the localities adjoining these farms is admitted to be of the best quality, both for steam, gas and coke, and fetches the highest price in the market.—Water. There is plenty of water on the property.—Gold. Banket reefs. There are formations carrying banket on Jackalsfontein, and it is confidently expected they will be found to contain payable gold reefs, and many persons are of opinion that these formations are those of the main reef series, close to which, as at Boksburg, the coal seams run. If a gold reef be found on the farm Jackalsfontein yielding 15 dwts. of gold per ton, the mill the rent will be increased £50 per annum; for every additional 10 dwts. per ton the rent will be increased £50 per annum; such increase, however, will be reduced pro rata if the yield of gold decreases.—Rights acquired. The farms have been acquired for prospecting and working coal, metals, minerals, and precious stones of whatever kind, with the right to stands for machinery and buildings, right to lay tramways or railways, the right to water and what further shall be and become necessary for working the said coal, metals, minerals, and precious stones. The directors assure that instructions have been given to the agents to obtain a full and complete position and depth of the coal seams on these farms, and the directors believe that these operations will prove that they have secured a valuable property for the company upon exceptionally favourable terms.

VIOLET CONSOLIDATED.—Average assay returns taken from the mine during July:—Violet shaft. First level west 3 feet 8 inches, 7 dwts. 9 grains. Second level west 3 feet 10 inches, 16 dwts. 9 grains. Ditto rise 1 foot 6 inches, 8 dwts. 1 ounce 10 dwts. Fourth level west 1 foot 2 inches, 17 grains. Ditto rise 2 feet 2 inches, 1 ounce 10 dwts. Fourth level east 1 foot 2 inches, 19 dwts. 21 grains. First level east 2 feet 2 inches, 7 dwts. 7 grains (footwall leader). Ditto 9 inches, 4 dwts. 9 grains (hanging). First level south 1 foot 6 inches, 4 dwts. 11 grains. Second level south 3 feet 6 inches, 1 ounce 3 dwts. 12 grains. Second level south 4 feet 6 inches, 13 dwts. 21 grains. In shaft 1 foot, 1 ounce 19 dwts. 16 grains. The manager reports in a cable—Mine looks splendid, especially Flora section.

## INDIAN.

BALAGHAT MYSORE.—Thomas Richards' report for the fortnight ending August 15: Ogle's shaft. The 410 feet level south of the crosscut east has been driven 15 feet, making a total distance of 155 feet. The 410 feet level south of the crosscut east has been extended 9 feet, total distance 75 feet 6 inches. No change.—Haines' shaft. The 410 feet level north has been driven 7 feet 6 inches, total distance 221 feet from the shaft. Lode 4 feet wide assays 1 dwt. 7 grains of gold per ton.

MYSORE GOLD.—R. Hancock's Mining operations for the fortnight ending August 17: Bows's shaft. 1460 feet level north of the crosscut west. The winze in the bottom of this level has been sunk 17 feet, making a total depth of 31 feet. The lode is 1 foot 6 inches wide, assaying 1 ounce 15 dwts. 16 grains.—1460 feet level north of sump winze. There are three stops in the back of this level, the average width of the lode being 4 feet, giving an average assay of 16 dwts. 7 grains.—1460 feet level north of crosscut east. This level has been driven 19 feet, making a total distance of 22 feet. The lode is 5 feet wide, assaying 1 ounce 15 dwts. 6 grains. We have started a rise in the back at the end of the crosscut. Rise 8 feet. The lode is 4 feet wide, assaying 3 ounces.—1360 feet level south of crosscut. This level has been driven 8 feet, making a total distance of 413 feet 9 inches. The lode has pinched out. The winze in the bottom of this level has been sunk 8 feet, making a total depth of 23 feet. The lode is 2 feet wide, assaying 1 ounce 17 dwts. 6 grains. There are six stops in the back of this level, the average width of the lode being 1 foot 8 inches, giving an average assay of 15 dwts. 20 grains.—1360 feet level north of crosscut. The lode in the stop in the back of this level is 1 foot 6 inches wide, assaying 2 dwts.—1360 feet level north of sump winze. There are two stops in the back of this level, the average width of the lode being 3 feet 9 inches, giving an average assay of 4 dwts. 6 grains.—1360 feet level north of sump winze, north of crosscut. This level has been driven 30 feet, making a total distance of 93 feet. The lode is 5 feet wide, assaying 1 ounce 15 dwts. The rise in the back of the crosscut, north-east level, has been put up 7 feet, making a total height of 43 feet. The lode is 4 feet wide, assaying 10 dwts.—1360 feet level north of sump winze, south of crosscut. This level has been driven 17 feet, making a total distance of 99 feet. The lode is 5 feet wide, assaying 5 dwts. 5 grains.—1360 feet level south of sump winze. There are four stops in the back of this level, the average width of the lode being 1 foot 9 inches, giving an average assay of 1 ounce 7 dwts. 12 grains.—1260 feet level north of crosscut. This level has been driven 21 feet, making a total distance of 216 feet. The lode is 4 feet wide, assaying 15 dwts. 16 grains. The rise in the back of this level has been put up 14 feet, making a total height of 46 feet. The lode is 4 feet wide, assaying 3 ounces.—1260 feet level south of crosscut. This level has been driven 15 feet, making a total distance of 25 feet. The lode is 9 inches wide, assaying 2 dwts. There are three

stops in the back of this level, the average width of the lode being 1 foot 4 inches, giving an average assay of 18 dwts. 16 grains.—1160 feet level north of crosscut. The lode in the stop in the bottom of this level is 1 foot 6 inches wide, assaying 4 dwts. 13 grains.—1160 feet level north of crosscut. This level has been driven 22 feet, making a total distance of 335 feet. The lode is 5 feet wide, assaying 3 ounces 10 dwts. The rise (No. 3) in the back of this level has been put up 21 feet, making a total height of 45 feet. The lode is 5 feet wide, assaying 2 ounces. There are two stops in the back of this level, the average width of the lode being 8 feet 6 inches, giving an average assay of 1 ounce 15 dwts. 13 grains.—1160 feet level south. There are six stops in this level, the average width of the lode being 2 feet 4 inches, giving an average assay of 9 dwts. 16 grains.—North of the crosscut east. The lode in the stop in the back of this level is 1 foot 6 inches wide, assaying 3 ounces.—1060 feet level north crosscut east. This level has been driven 16 feet, making a total distance of 123 feet 6 inches.—525 feet level south. There are two stops in the back of this level, the average width of the lode being 1 foot 6 inches, giving an average assay of 16 dwts.—Orook's shaft. The crosscut west from the bottom of the shaft has been driven 14 feet, making a total distance of 26 feet.—890 feet level north crosscut east. This level has been driven 16 feet, making a total distance of 127 feet 6 inches. We have passed through a mixed lode, containing about 1 foot of quartz. The driving of the crosscut will be continued for some distance further. There are two stops in the back of this level, the average width of the lode being 3 feet, giving an average assay of 1 ounce 15 dwts. 3 grains.—525 feet level south. There are five stops in the back of this level, the average width of the lode being 4 feet 11 inches, giving an average assay of 1 ounce 5 dwts. 13 grains.—780 feet level south. The rise in the back of this level has been put up 4 feet, making a total height from the back of No. 6 stops of 73 feet, and holed to the 620 feet level south. There are 10 stops in the back of this level, the average width of the lode being 3 feet 5 inches, giving an average assay of 13 dwts. 11 grains.—420 feet level south. The lode in the stop in the back of this level is 1 foot 6 inches wide, assaying 7 dwts. 3 grains.—Gilbert's shaft. 900 feet level north. This level has been driven 15 feet 6 inches, making a total distance of 59 feet 6 inches. The lode is 3 feet 6 inches wide, containing some small branches of quartz, assaying 3 dwts. 6 grains. The crosscut west from the shaft at the 9.0 has been driven 17 feet, making a total distance of 75 feet.—650 feet level north crosscut east. This level has been driven 13 feet, making a total distance of 100 feet.—650 feet level south. This level has been driven 15 feet 6 inches, making a total distance of 215 feet. The lode is 5 inches wide, assaying 12 dwts. 3 grains.—510 feet level north. There are four stops in the bottom of this level, the average width of the lode being 2 feet 4 inches, giving an average assay of 19 dwts. 11 grains.—430 feet level north. The lode in the stop in the back of this level is 1 foot wide, assaying 10 dwts.—290 feet level north. There are two stops in the bottom of this level, the average width of the lode being 1 foot 3 inches, giving an average assay of 11 dwts. 22 grains.—130 feet level south. The lode in the stop in the bottom of this level is 2 feet wide, assaying 8 dwts.—Tonant's shaft. 750 feet level north of crosscut west. This level has been driven 14 feet 6 inches, making a total distance of 54 feet. The lode is 1 foot wide, assaying 1 dwt.—750 feet level south of the crosscut west. This level has been driven 14 feet, making a total distance of 31 feet 6 inches. The lode is 8 inches wide, assaying 1 dwt. 16 grains.—530 feet level north. The lode in the stop in the back of this level is 1 foot 6 inches wide, assaying 17 dwts.—360 feet level north south of crosscut. There are two stops in the bottom of this level, the average width of the lode being 1 foot 9 inches, giving an average assay of 11 dwts. 21 grains.—Schwarz's shaft. 320 feet level north. There are two stops in this level, the average width of the lode being 2 feet, giving an average assay of 22 dwts. 5 grains.—McTaggart's shaft. We have two machines cutting a pit at the 790.—790 feet level north. This level has been driven 11 feet, making a total distance of 37 feet 6 inches. The lode is 1 foot 6 inches wide, assaying 14 dwts. 5 grains.—550 feet level north of the crosscut west. This level has been driven 1 foot 6 inches, making a total distance of 44 feet 10 inches.—650 feet level south of crosscut west. The lode in the stop in the back of this level is 1 foot 6 inches wide, assaying 3 ounces 10 dwts.—550 feet level north.—550 feet level south of crosscut west. The driving of this has been suspended. The lode in the stop in the bottom of this level is 1 foot wide, assaying 5 dwts.—450 feet level north. There are four stops in this level, the average width of the lode being 1 foot, giving an average assay of 11 dwts.—450 feet level south. The lode in the stop in the back of this level is 2 feet wide, assaying 3 dwts. 6 grains.—320 feet level south. The lode in the stop in the back of this level is 2 feet wide, assaying 8 dwts.—Prospect shaft No. 2. This shaft has been sunk 16 feet 8 inches, making a total depth of 183 feet 3 inches.—Ribblesdale's shaft. 1830 feet level north. This level has been driven 11 feet, making a total distance of 69 feet.—1520 feet level north. This level has been driven 20 feet, making a total distance of 300 feet. The lode is 5 feet wide, assaying 9 dwts. 18 grains.—Crosscut west to Ribblesdale's shaft from the 360 south of sump winze. This has been started to effect a communication with Ribblesdale's shaft. Driven 5 feet.—1060 feet level north of the crosscut west. This level has been driven 13 feet, making a total distance of 36 feet 6 inches.—510 feet level south.—Williams' shaft. Crosscut east from the 173, south of the crosscut. This level has been driven 5 feet, making a total distance of 20 feet. The lode is 8 inches wide, assaying 3 dwts. 5 grains.—Health. Good.

MYSORE REEFS (Kangundy).—Superintendent's report for fortnight ending August 18: Underlie shaft. This shaft has been sunk 5 feet, now 39 feet below the 550 level. The lode is 18 inches wide, assaying 5 dwts. 4 grains of gold to the ton. 550 feet level north has been extended 10 feet, now 73 feet from shaft. The lode is 2 feet wide, assaying 5 dwts. 1 grain of gold to the ton. Winze below intermediate level has been sunk 4 feet 3 inches, now 31 feet below the level. The lode is 1 foot 8 inches wide, assaying 1 ounce of gold to the ton.—Stops above this level. The lode is 2 feet wide, assaying 19 dwts. 10 grains of gold to the ton. Vertical shaft has been sunk 5 feet 6 inches, now 15 feet below the 425 level. The lode is 1 foot wide, assaying 11 dwts. of gold to the ton. 425 feet level north has been extended 12 feet, now 41 feet 8 inches from shaft. The lode is 1 foot 6 inches wide, assaying 13 dwts. 4 grains of gold to the ton.—Stops below the level north of Underlie shaft. Average level 425 feet. The lode is 1 foot 6 inches wide, assaying 1 ounce 15 dwts. 260 feet level south of crosscut has been extended 16 feet 5 inches, now 47 feet 6 inches from crosscut. The lode is the full width of end (45 feet); no footwall. Assay value 10 dwts. 14 grains of gold to the ton.

MYSORE WEST AND MYSORE WYNAD CONSOLIDATED.—Tank Mine: Half-monthly report to August 15. South shaft is down 534 feet 3 inches, progress 6 feet 9 inches. 507 level No. 1 drive north on west lode is in 173 feet 8 inches, progress 12 feet. The quartz is 1 foot 8 inches wide, worth 4 dwts. per ton. 507 level No. 2 drive north on east lode is in 134 feet 10 inches, progress 9 feet 6 inches. The quartz is 1 foot 6 inches wide, worth 2 dwts. per ton. 507 level No. 3 drive north on east lode is in 158 feet 10 inches, progress 13 feet. The end is very much mixed up but shows 1 foot of quartz, worth 6 dwts. per ton. 507 level north on east lode No. 1 rise was carried up to a distance of 41 feet when it holed to the 450 north level, progress 10 feet 9 inches. The quartz is 2 feet wide, worth 4 dwts. per ton.—517 north-east lode No. 1 winze. We have started a winze on this lode, and have driven 15 feet 15 inches. The lode is 15 inches wide, assaying 1 ounce 6 grains of quartz, worth 14 dwts. per ton. Walker's shaft is down 109 feet, progress 9 feet. The rock is still very hard, and the water a difficulty.

NUNDYDROOG.—Thomas Richards' report for the fortnight ending August 15: Kennedy's shaft has been sunk 6 feet 6 inches, total depth 43 feet below the 700 level. The 700 crosscut west has been extended 2 feet, total distance 121 feet 6 inches from the shaft. The 700 north has been driven 17 feet, total distance 164 feet 6 inches. Lode 6 inches wide, assays 3 dwts. 18 grains. The 700 level north has been driven 15 feet, total distance 145 feet from the shaft. Lode assays a trace of gold. The 690 shaft has been driven 9 feet 6 inches, total distance 418 feet 6 inches. Lode assays a trace of gold. In two stops in the back of the 520 north the lode averages 4 feet in width, and 15 dwts. 15 grains in assay value. The lode in two stops in the back of the 520 south averages 3 feet in width, and 2 ounces 7 dwts. 12 grains in assay value. The 440 south crosscut west has been extended 13 feet 6 inches, total distance 251 feet. No change. In two stops in the back of the 370 north, the lode averages 4 feet 6 inches in width, and assays 13 dwts. 3 grains in assay value. The lode in two stops in the back of the 370 south averages 3 feet 6 inches in width, and 5 dwts. 15 grains in assay value. The 300 north has been driven 13 feet 3 inches, total distance 491 feet 6 inches. Lode assays a trace of gold. The rise in the back of this level has been put up 9 feet 6 inches, total height 90 feet. Lode 6 inches wide, assays 2 ounces 15 dwts. of gold per ton. In two stops in the back of the 330 south the lode averages 2 feet 6 inches in width, and 6 dwts. 11 grains in assay value. The 230 north rise has been put up 2 feet 9 inches, total height 53 feet, and is communicated with the 160 feet level north. The 230 south drive has been put up 2 feet, total height 30 feet. Lode assays a trace of gold. A crosscut east from this level has been put out 18 feet, and has intersected some stringers of quartz of no assay value. In the stop in the back of the 180 north the lode is 3 feet wide, and assays 5 dwts. North shaft has been sunk 12 feet 8 inches, total depth 92 feet 6 inches below the 600 level. Lode 2 feet 6 inches wide, assays 2 dwts. 12 grains. The new vertical shaft has been sunk 8 feet, total depth 177 feet 6 inches below surface.—Main shaft. The 1160 north has been driven 23 feet, total distance 233 feet 6 inches, and has communicated with the level south from the 1040 north winze. The 1160 level north from the winze has been driven 13 feet, total distance 50 feet 6 inches from the winze, or 348 feet from the shaft. Lode 3 feet wide (quartz), assays 2 ounces 2 dwts. 12 grains. The 1180 north rise has been put up 19 feet total height 56 feet. Lode 1 foot 6 inches wide, assays 2 ounces 5 dwts. The 1080 north rise has been put up 11 feet 6 inches, total height 57 feet. Lode 2 feet wide, assays 12 dwts. 12 grains. In the 1600 north back stop the lode is 2 feet wide, and assays 3 ounces of gold per ton. The lode in the stop in the back of the 1030 north is 2 feet wide, and assays 5 dwts. In the stop in the back of the 920 north the lode is 1 foot wide, and assays 1 ounce 2 dwts. 12 grains; and in the 900 north bottom stop it is 12 feet wide, assaying 5 dwts. The 690 north has been driven from the north crosscut west 4 feet 6 inches, but the lode is of no assay value. The 630 north on Kennedy's lode from former crosscut east has been driven 2 feet 8 inches, total distance 15 feet from the crosscut. The lode is of no assay value. The 510 north crosscut east has been extended 11 feet 8 inches, total distance 32 feet 8 inches. At this point a well-defined lode supposed to be Kennedy's lode has been intersected, but it is of no assay value. This is now being opened upon southwards, to the south of the large crosscut, to prove its value in this direction. The 370 north has been driven 8 feet, total distance 236 feet 6 inches. Lode of no assay value.—Taylor's shaft. The 1240 north has been driven 1 foot 6 inches, total distance 327 feet 6 inches. The lode, consisting of stringers of quartz, assays a trace of gold. In the stop in the back of the 1160 north the lode is 1 foot wide, and assays 5 dwts. 6 grains. The lode in the stop in the back of the 1090 north is 1 foot wide, and assays 7 dwts. 12 grains. In two stops in the back of the 1030 north the lode averages 2 feet 3 inches in width and 3 dwts. 10 grains in assay value. The 920 level has been driven southwards from the crosscut east of the shaft upon a portion of lode which is standing in the hanging wall west of main level. This drive has been extended 3 feet 6 inches on a branch of quartz which assays 8 dwts. 18 grains. In two stops in the back of the 323 north the lode averages 2 feet 3 inches in width and 5 dwts. 15 grains in assay value. In two stops in the back of the 540 north the lode averages 3 feet in width and 5 dwts. 3 grains in assay value.—The lode in the stop in the back of the 680 north is 2 feet 6 inches in width, and assays 15 dwts. 15 grains. In two stops in the back of the 100 north the lode is 1 foot in width and 5 dwts. 15 grains in assay value. In the

stop in the back of the 450 north the lode is 1 foot wide, and assays 5 dwts. and in the 230 south back stop it is 1 foot 6 inches wide, assaying 15 dwts. 6 grains. No. 1 trial shaft has been sunk 5 feet, total depth 98 feet below surface. Lode 3 feet wide assays a trace of gold. No. 2 trial shaft has been sunk 2 feet 3 inches, total depth 78 feet 9 inches below surface. Lode 6 inches wide assays 15 dwts. 18 grains, tailings 3 dwts. 15 grains. No. 3 trial shaft has been sunk 1 dwt. 6 grains, tailings 3 dwts. 15 grains.

NINE REEFS.—Superintendent's report for fortnight ending August 17: Oriental lode, the 405 feet level north of main shaft. This has been extended 17 feet, total distance from shaft 28 feet. The lode is 2 from 5 to 8 feet wide, composed of quartz and arsenical pyrites throughout, assaying 5 dwts. 11 grains of gold per ton.—The 400 feet level south of main shaft. This has been extended 14 feet, total distance from shaft 28 feet 6 inches. The lode is 8 feet wide, composed of quartz, arsenical pyrites, intermixed with a little black rock, assaying 4 dwts. 15 grains of gold per ton.—The 310 feet level north of main shaft. This has been extended 23 feet, total distance from shaft 337 feet. The lode is 6 feet wide, composed of quartz and arsenical pyrites throughout. This makes a total of 6 dwts. 10 grains of gold per ton.—The 310 feet level south of Baysard's shaft. This has been extended 5 feet 6 inches, total distance from shaft 23 feet 6 inches. At this point we have driven a crosscut west 22 feet 6 inches, but have not yet intersected the lode. Total drive in this level for the fortnight is 23 feet.—Morrison's shaft. We have completed the cleaning up of this shaft, and are now laying air pipes to connect the 550 level north by rock drill.—New water shaft. The crosscut has been driven 33 feet 6 inches, increasing a little.—Surface work. This is progressing in the usual way. Health. The health of the camp continues good.

YERRAKONDA.—Superintendent's report for fortnight ending August 11: South shaft. The 350 feet level south of this shaft has been extended 21 feet, making a total distance from shaft of 45 feet. The lode is 4 feet wide of 2 feet 6 inches is solid quartz, worth, according to assay, 5 dwts. of gold to the ton. The 350 level north has been extended 13 feet 3 inches, making a total distance from shaft of 42 feet. The lode is 2 feet wide, of a mixed character, assaying 5 dwts. 1 grain of gold to the ton. The 225 feet level south has been extended 14 feet 3 inches, making a total distance from shaft of 276 feet 3 inches. The lode in this end is 3 feet 6 inches wide, composed chiefly of quartz worth, according to assay, 4 dwts. 4 grains of gold to the ton. Health. I am pleased to say the health of the camp is fairly good.

## MISCELLANEOUS.

BIG VALLEY ORE.—The acting manager reports to the managing director as follows:—I expect by middle of September to be up to point where we got stuck on surface. Tunnel is now run 400 feet, gold increasing in the face. From showing of gold in the face gravel it merely will turn out well when we get to bed rock. So far the outlook is satisfactory. This makes me feel very confident we will get good pay ore when we get to bed rock, and all the best miners here believe we will certainly have good ground.

CHIAPAS.—Mine report for fortnight ending July 31. Providencia crosscut No. 1 driven 10 feet, total 400 feet. In quartz wall on south. Francisco adit driven 30 feet, total 243 feet. In broken ground, carrying traces of the ton. From showing of gold in the face gravel it merely will turn out well when we get to bed rock. So far the outlook is satisfactory. This makes me feel very confident we will get good pay ore when we get to bed rock, and all the best miners here believe we will certainly have good ground.

CURTIN DAVIS PROPRIETARY.—Mine manager's report for the week ending July 18: 100 feet level. Winze below this level has been sunk a further distance of 3 feet by two men, total 47 feet. Lode now showing about 3 inches wide, principally carbonate of iron. The assaying wall continues very much the same, and well defined.—130 feet level. Rise advanced 3 feet, and the level changed into jointy slate and letting out more water as we were working the lode in the winze. Should the ground keep as good for working as at present will hole through to the winze during the coming week.—410 feet level. Main level has been driven 7 feet, total 61 feet. South of crosscut and 140 feet south of tunnel entrance. The lode is slightly disturbed lying on an angle of 45° in the face of the drive, but carrying some splendid fair ore. There is 9 inches of ore on the footwall, 50 per cent. of it being clean fair ore, the remainder being principally carbonate of iron. Assays of this fair ore are 157 ounces silver and 35 1/2 per cent. copper.—Eastern crosscut. Have started drive in this crosscut for the main hanging wall now that we have the level connected through to the south face.—463 feet level. Driven 10 feet total 163 feet. The lode formation is now 2 feet wide between good wall with 4 inches of carbonate iron on the footwall, the bulk of the lode material being soft black slate, and likely to make ore again very soon. 430 feet level. Driven 4 feet, total 326 feet. Lode is 18 inches wide, carrying some fair ore and copper pyrites. The former assaying 454 ounces silver a ton, and 23 per cent. of copper, proving that the quality of the ore is well maintained into the 430 feet level driven 11 feet, total 182 feet. The lode is 8 inches wide and carrying some good looking copper pyrites and fair ore, which is being bagged for sampling. At 159 feet we cut a vein containing stibnite, and iron and copper pyrites, which assayed 18 ounces of silver.

CURTIN DAVIS PROPRIETARY.—Mine manager's report for the week ending July 25: 100 feet level. Winze sunk 2 feet and holed through to the 180 level. The hanging wall continues good in the winze the whole way, but where it connected with the rise there is no ore showing.—180 feet level. Rise above this level advanced 3 feet, and the level changed through to the 100 level. We now have good ventilation in this level, making the connection I have taken the men from here to sink a winze below the 425 level to connect with the 503 level.—430 feet level. Driven 8 feet, total 201 feet. The ground is a good deal disturbed in the adit, and some hard bars of pyrites and quartzite have been passed through. There are 9 inches of ore on the footwall, carrying a fair percentage of fair ore and copper pyrites. Owing to the country being so much thrown about the lode is lying on an angle of 45 degrees, at many places rather badly for working.—Eastern crosscut. This has been driven a total distance of 37 feet. Country blue slate with veins of calc spar. No change of importance to note.—490 feet level winze. Have started to cut a pit for winze 20 feet inside tunnel. This will connect with the 500 level at about 160 feet in that drive, and open up a good block of ground.—530 feet level. Driven 11 feet, total 150 feet. The footwall is nearly vertical, and has 15 inches of siliceous with copper and iron pyrites lying against it. From this drive shows more strength than it did last week.—540 feet level. Driven 4 feet, total 210 feet. There is 2 feet of ore on the hanging wall principally pyrites and copper pyrites, with fair ore mixed through. The ground keeps hard and shows very little change.—540 feet level. Driven 7 feet, total 189 feet. There is a vein of ore on the hanging wall 6 inches wide which has given 175 ounces silver and 35 per cent. copper. The ground has become much harder than usual, but otherwise there is no change of importance.

OTAGON EXPLORERS.—We are officially informed that Mr. James Brown (one of the Otagon Explorers prospectors) is just in from Mount Maitland district with samples of stone from the Tower Hill, lately brought by the Otago Explorers' Mount Leonora. The stone is a dark grey, and the gold and silver are very rich. Mr. George Davy, who has charge of the developments, reports that the reef is a main line one and can be traced by surface outcrops for 3 miles, and at the point where he is now trenching across it is very wide. He has trenching at 40 feet without getting the footwall and describing it as the biggest reef he has ever seen. Since pegging the Tower Hill, Brown has made another discovery of a rich reef 5 miles north of Mount Leonora, No. 22 acres, naming it the Rajah. The reef was discovered through the face stone showing a little gold. The reef when uncovered was 2 feet wide, and the samples show a quantity of gold. One in which there was no visible gold gave a fine assay of 7 ounces 4 dwts. 11 grains. The loss will be at once developed by the Otago Explorers.

ROME CONSOLIDATED.—Extract from report, dated July 27: At present the work being done is driving south from No. 1 shaft and sinking No. 2 shaft to connect with the drive. In No. 1 shaft at 120 feet deep a drive has been put in north about 12 feet. A parcel of 10 lbs. of ore from this parcel has been assayed, and assays 3 dwts. 10 grains. It is possible, by next mail, to send you samples of the ore.

SANTA ANNA.—Half monthly report.—Level No. 1 has progressed about 2 fathoms since the 1st of the month. The lode has pinched from about 1 foot in width to 16 inches, but is more solid and clearly defined. The lode through this mine are constantly fluctuating in width, but at an average is about 2 feet. Level No. 2 has also made capital progress, but this is not now driving, but taking up the floor of the level formerly known as No. 1, to the 100 feet level. In order to bring it down to water level. Level No. 3 is a very hard one, and goes slowly, but there is now a very good pit working here, and since first started has made about 10 feet. The lode here is about 1 foot thick, and the best-looking lode in the mine.

NORWEGIAN COAL.—On the Norwegian island of Andön are considerable deposits of coal, which extend over an area measuring some 5 miles to 6 miles in the one direction and 3 miles in the other. Over the coal is a layer of peat, and under the coal is solid granite. Between the layers of coal, sandstone is occasionally found upon, as are also deposits of iron ore, slate, &c., which also may yield materials of value. About 25 years ago, at the instance of the State, a number of borings were undertaken, but these researches were abandoned until some five years ago, when they were resumed by private initiative, an influential syndicate having been formed for that purpose. Subject to proper working having been sanctioned by the year 1901, and subject also to a percentage being paid to the State, the syndicate named have secured a concession for working these coal deposits.

THE ASSOCIATION OF MINES OF THE SOUTH AFRICAN REPUBLIC have cabled to their London agents, the Robinson South African Banking Company (Limited) that for the month of August an output amounting to 38,037 ounces was obtained by the following companies:—Roodport United Main Reef, Meyer and Charlton, Princess Estate, Van Ryn, George Goch (Amalgamated), Womersley, Langlaagte Estate, Block B Langlaagte Estate, Langlaagte Estate, New Midas Estate. This compares with 35,332 ounces in the preceding month, including Lancaster, showing an increase of



The Subscription List will close today (Saturday) at 12 o'clock noon. The Cablegram from Australia, dated 7th instant, shows that from 45 tons of ore a Cablegram from the New Options Syndicate Limited, 464 tons of gold were obtained, or an average of 10 ounces 6 dwts. 5 grains per ton, resulting in a profit of £1,098.

# THE NEW OPTIONS COMPANY Ltd.

Incorporated under the Companies' Acts, 1852 to 1890.  
CAPITAL - £50,000,  
IN 50,000 SHARES OF £1 EACH.  
Of which 40,000 will be issued as fully-paid to the Vendors as purchase consideration, and 10,000 Shares are now offered for Subscription; Payable: 1/6 per Share on Application; 7/6 per Share on Allotment; and the balance in Calls of 5/- each as required, at intervals of not less than two months.  
Directors: EDGAR TAYLOR, Esq. (Messrs. John Taylor & Sons) 6 Queen Street Place, London, E.C. (Chairman). THOMAS BLAIR, Esq., Wool Exchange, London, E.C. EDWARD POPE, Esq., Director of Golden Australia, Limited, ROBERT TAYLOR, Esq. (Messrs. John Taylor & Sons), 6 Queen Street Place, London, E.C.  
LLOYDS BANK, LIMITED, 72 Lombard Street, London, E.C.  
Messrs. JOHN TAYLOR & SONS.  
Solicitors: Messrs. LYNE & HOLMAN, 5 & 6 St. Winchester St., London, E.C.  
Secretary: JOHN GARLAND, Esq.  
Office: 6 & 7 Queen Street Place, London, E.C.  
PROSPECTUS.

This Company is formed to take over the assets (with the exception of the uncalled Capital, Gold and Cash in hand) of the New Options Syndicate, Limited, in liquidation, and of providing additional working capital for the further development of its mining property and the carrying out of its objects on an enlarged scale.

The mining property consists of the Monarch Gold Mine, which is 60 acres in extent, and the adjoining property to the south, situated in the Beechworth district, in the Colony of Victoria.

The Monarch Mine has been prospected by the New Options Syndicate Limited, with highly satisfactory results.

Mr. DAVEY, the Manager of the Crescent Gold Mining Company Limited, and representative in Victoria for many years past of Messrs. John Taylor & Sons, first drew the attention of the Directors of the New Options Syndicate Limited, to the property by cablegram and letters in April and May last. He then reported that the lode had been traced for a distance of 300 feet, and that its average width was six feet. The property had been developed by means of trenches for a length of 200 feet, and portions of the lode were very rich. Its total length on the line of the lode is 4,000 feet, and the width on the dip of the lode is 1,300 feet.

The information furnished by him being of a very favourable character, the option of purchase of the property was secured, and instructions given to further test its value by prospecting the lode and by making a mill trial of the ore. In due course these instructions were carried out.

On the 5th May, I have carefully examined the lode this week, it is 12 feet wide, and the samples which I took indicate that its average value is 10 dwts. Should the trial crushing yield such a return, I shall not hesitate to recommend the purchase of the property, as the natural facilities for mining and conveying stone to the mill are exceptional, to say nothing of the size of the lode.

In a subsequent letter, dated June 7th, Mr. DAVEY, after receiving instructions as to prospecting, &c., wrote as follows: "I immediately on receipt of this cable sent two men to sink a vertical shaft to cut the 'Monarch' Lode at a depth of 20 feet from the surface, the lode being unusually flat, dipping at an angle of only 26 degrees from the horizontal. Meanwhile the two owners are sinking on the lode from the surface and stopping out a trial crushing as they go. I am pleased to state that this lode is developing most satisfactorily, and is improving daily in value, gold being freely visible over a width of about 4 feet, whereas the remaining portion of the lode (6 feet) on the foot-wall does not carry visible gold, but is valued at about 5 dwts. per ton."

On the 6th July Mr. DAVEY reported by cable the result of his explorations and mill trials, which were of a surprising character.

Twenty tons of ore obtained from the outcrop yielded 61 ounces of gold to the ton. In the prospecting shaft, at a depth of 40 feet, the lode was 4 feet wide, and of the estimated value of 8 ounces of gold to the ton.

A subsequent crushing, advised on the 27th of July last, also of 20 tons of ore from the Monarch Mine, yielded no less than 385 ounces of gold, including 96 ounces from 3 cwt. of specimens. This extraordinary yield must not be taken as representative of the quality of the ore throughout the mine, and a further trial was at once proceeded with of lower grade ore, with the result, received by cablegram on August 5th, that from 12 tons crushed 59 ounces of gold were obtained, thus showing the average of the three trial crushings to be at the rate of 11 ounces of gold per ton.

It is estimated that a good margin of profit would be shown, even with a yield of 10 dwts. of gold to the ton, but with such ores as have been actually milled, the profits would be very large indeed.

The quality of the gold produced in the district is high, the value being upwards of 44 an ounce.

Mr. DAVEY describes the district as possessing great natural facilities for mining and milling, enabling the ore to be very economically dealt with. He also states that water abounds in sufficient quantity for all requirements, and that there is abundance of excellent timber in the neighbourhood suitable for all mining purposes. An excellent mill site is also obtainable close to the river, which runs in proximity to the Company's property.

The working capital now to be provided will enable extensive development of the Monarch Mine to be proceeded with, and should the results, as anticipated, be satisfactory, it is intended in due time to offer the property for re-sale to a larger Company to be hereafter formed.

The New Options Syndicate Limited, in liquidation, who are the Vendors, have fixed the price to be paid for the properties at £40,000, and stipulate that payment shall be made in fully-paid Shares of the New Company.

10,000 Shares are therefore available to provide working capital.

The following contracts have been entered into—namely:—

1. An Agreement dated 29th April, 1896, between Arthur E. Smith and John McKennie of the one part, and Thomas Garby DAVEY of the other part.

2. An Agreement dated the 27th day of August, 1896, between The New Options Syndicate, Limited, and John Garland, its Liquidator, of the one part, and this company of the other part.

3. An Agreement dated the 26th day of August, 1896, between John Taylor & Sons of the one part, and Alfred Wright, as Trustee for this Company, of the other part.

Copies of the above contracts and of the Memorandum and Articles of Association of the Company may be seen at the offices of the Company's Solicitors.

Besides the above Contracts there are other agreements, to which the Company is a party, made by or on behalf of the Vendors and others, with reference to the formation of this Company and subscriptions to its Capital, which agreements may be Contracts within the meaning of the 38th Section of the Companies Act, 1867. Applicants for shares shall be deemed to have had notice of these agreements, and to have waived the specification of the names of the parties to, and the dates and other particulars of the said agreements, whether under the provisions of Section 38 of the Companies Act, 1867, or otherwise.

Applications for Shares should be made on the annexed form, and forwarded to the Company's Bankers, Lloyds Bank Limited, 72 Lombard Street, London, E.C., accompanied by the amount payable on application.

Where no allotment is made the deposit will be returned in full.

Prospectuses and Forms of Application may be obtained at the Bankers, and at the offices of the Company.

Leipzig, 27th August, 1896.

Notes: 28th September, 1896.—Since the date of the above Prospectus, a Cablegram has been received from Mr. DAVEY, dated September 7th, notifying that as the result of a further crushing of 15 tons of ore, 27 ounces of gold were obtained, and that the shaft has reached a depth of 60 feet, the lode being 8 feet wide, of the estimated value of 10 dwts.

## RAND OUTPUT FOR AUGUST.

The gold crushings at Witwatersrand, according to a cable received by the Union Steamship Company, for the month of August were 212,428 ounces, which is the record output. This shows an increase of 8555 ounces, as compared with the previous month's total, and an increase of 8855 ounces, as compared with the corresponding month of last year. The following table gives crushings to date:—

	1891	1892	1893	1894	1895	1896
January	52,205 15	64,560 8	108,374	149,814	177,463	148,178
February	50,679 2	60,449 8	93,752	151,870	169,295	167,018
March	52,949 1	93,444 11	110,474	165,372	184,545	173,932
April	64,872 16	95,562 6	124,053	165,745	186,323	174,518
May	58,884 1	99,436 6	116,934	169,773	194,584	195,000
June	54,924 10	110,273 1	112,907	163,163	206,941	191,640
July	50,070 4	102,322 3	126,069	174,977	203,373	212,428
August	45,051 84	107,831 13	128,802	176,707	194,704	—
September	72,799 8	118,167 6	138,599	173,378	192,632	—
October	72,353 15	108,794 15	138,690	175,304	195,110	—
November	60,019 11	170,798 17	146,357	182,104	178,428	—
Total	720,237 236	1,340,088 1	1,478,473	2,024,159	2,277,635	1,463,518

ENGLISH COAL IN JAPAN.—A consular report from Tokio, Japan, dated June 14, contains the following statement with reference to the use of English coal in Japan:—In the supply of coal, the English product is everywhere giving way to the Japanese, as a result of the fall in price. In short, the difference of price in favour of Japanese manufacturers and producers, having become greater owing to the fall in price, and the cost of manufacture being naturally cheaper in consequence of low rates of wages and abundance of coal, it is easy for Japanese to beat English manufacturers in the Oriental market.

## KADUR-MYSORE GOLD MINES.

### AN ENCOURAGING CIRCULAR.

IN a circular to the shareholders, the secretary of the Kadur-Mysore Gold Mines (Limited) reports:—"My directors have pleasure in submitting to you details of the work and development upon the property of the company, as shown in Colonel T. T. Leonard's and Mr. J. A. Grogan's reports. My directors are satisfied with the steady progress which has been made, and may mention that the work hitherto has been mainly confined to the Ajimpar Block and to the unwatering of the Hukkedonna pit. It is believed, however, that the Tarikeri Block will prove of great value, and my directors would draw your attention to the report thereupon of Mr. H. Pridaux, under date July 13 last. With regard to the personnel at the mines, my directors have engaged the services of Mr. J. A. Grogan in succession to Mr. W. Patmore, as mine superintendent. Co. onel T. T. Leonard, the company's manager and agent in Bangalore, expresses a high opinion of Mr. Grogan's abilities. It will be gathered from Mr. Grogan's reports that he has already formed very favourable views of the value of the company's property.

"MACHINERY.—My directors are giving very careful attention to the question of adequate plant and machinery, as it is their opinion that development is sufficiently advanced to justify the erection of at least a 10 stamp battery, and in this respect they do not think there will be any difficulty as to timber, fuel, and water.

"ASSAY.—The report of Mr. (Claude) assayer to the Bank of England, upon ore from the Kadur-Mysore property, shows, as shareholders are already aware, the very favourable result of 2 ounces 6 dwts. of gold per ton of 2240 lbs.

"TARIKERI BLOCK.—My directors desire to specially direct your notice to the report of Mr. H. Pridaux upon this part of the company's property, and also to Mr. Grogan's report on the same. The formation of a subsidiary company to thoroughly develop and work the Tarikeri Block is engaging the earnest consideration of my directors. The total area of the property of the Kadur-Mysore Gold Mines (Limited) is about 1300 acres, and it will be obvious, therefore, that with so large an extent of territory there is ample scope for advantageously selling or leasing portions of it to sub-entrepreneurs. In the event of my directors arriving at a decision to deal with the Tarikeri Block in the way above mentioned, shareholders of the parent company will receive the right of preferential allotment in any new company which may be formed.

"Mr. H. Pridaux's report on the Tarikeri Gold Mines:—"These mines are situated on the Tarikeri Taluk, Mysore, India, and cover an area of 674 acres, which contain several reefs running parallel and across the hills. During my examination I found several old workings into which I entered, and the reefs that had been left standing yielded gold in paying quantities. I also found gold by washing the sands in the nullas below the reef; in fact, quartz which was scattered over the surface would by crushing and washing generally show free gold. I was very favourably impressed with the property, and have no doubt but that in ancient times very profitable gold mines existed in this district. The reefs will certainly extend to great depths, and I see no reason, with modern machinery, why the mine cannot again be made to yield gold in large paying quantities, and at a great profit. I learn that since my visit the railway has been brought within seven or eight miles of these mines. There are also good roads in the immediate vicinity. There would be no difficulty to supply a first-class mine and mill with the necessary timber, fuel, and water. In conclusion, I am of opinion that valuable payable gold mines exist on the property."

"Mr. J. A. Grogan's general report on the Tarikeri Block:—"Ajimpar, July 22, 1896.—I have been to the block, and viewed the several old workings, and was astonished to see what rich lodes of quartz exist there. There is one large shaft 50 feet in depth, another smaller one by the side of it 6 feet in depth, and another shaft, called Siddapa Gavi, 20 feet in depth, and 10 feet apart from one another; and a few cuttings worked to the length of 400 feet, all old workings. Above these old workings I found a reef 4 feet wide, and the quartz is of a ferruginous nature. I have crushed samples of them myself, and found visible gold, which will go, if assayed, 18 dwts. to a ton. There are heaps of stuff, and all must have been extracted from these old workings, and I have found for 1 lb. of stuff large specks of gold when I washed it. This place is really worth while working at, for it is bound to pay—I am quite certain of it. It is a great wonder how such a valuable affair was not made known to the public all these many years. I also heard that many natives are washing gold at this place, which they get a good quantity of. We should not neglect to open out this. The largest shaft has no water, but is fearfully caved in, and would be unsafe to work. The Siddapa Gavi is 20 feet, as already mentioned, and I would suggest that we should clean out this one to see if the reef is running down. I heard that there are many underground workings at these shafts, so it would be best to start a new shaft and then drive into these old workings, which will be less dangerous. I have thoroughly prospected this block, and I found in all my washings visible gold. I trust that this will not be delayed in working, as it will not be a loss to the company which starts it. I have had experience of 17 years on gold fields, and I am quite certain that in a few years more this will be a most flourishing field, especially this block. The stuff from the old workings alone will prove its value, and I trust that I may yet be the worker of this block to testify this report."

"Note by Colonel Leonard on the above report:—"Grogan says there are over a couple of thousand tons of quartz—fine stuff—on the block, which might at once be turned to advantage by crushing." The following extract from letter from Colonel Leonard points to important discoveries upon the Tarikeri Block, and is valuable as confirming the report of Mr. Pridaux:—"August 5, 1896.—Have cabled 'Tarikeri Gold,' meaning thereby, as per arranged words, that work had been put in hand at Tarikeri, that reefs and streams had been tested and gold found in both. Grogan reports very favourably of Tarikeri. He says that there are immense stocks of quartz on surface, which he estimates will give about an ounce per ton when crushed. Further, that the mine can be easily worked, and labour plentiful, and that it is one of the best properties he has seen."

"In conclusion, my directors express their conviction that in the Kadur-Mysore Gold Mines the company possesses properties of undoubtedly great value and of vast mineral possibilities. The development of the Ajimpar Block will be steadily proceeded with, and suitable machinery provided. The policy to be adopted with regard to the Tarikeri Block is outlined in the foregoing report, and should prove most beneficial to the interests of shareholders."

SOME GOOD BRITISH ORE SPECIMENS.—We have been afforded an opportunity of inspecting a number of specimens taken from a Welsh mine, known as Cefn Coch. The specimens are excellent ones, not only showing gold, but showing it freely distributed through the stone. The achievements of more than one Welsh company entitle us to expect considerable things of the mines located in that part of the country, and certainly the specimens we have seen would support comparison with ore taken from almost any part of the globe. It has often been with us a cause for wonder that when so much capital is sent to remote parts of the globe so little enterprise is shown in developing mines which, so to speak, are situated at the visitor's door, which are open at any time to their inspection. Judging from these stones, it would certainly seem that some at least of the capital which is so assiduously sent to the uttermost parts of the earth might judiciously and profitably be kept at home.

A RAILWAY TO BEN NEVIS.—It is stated that an English company intends to construct a railway to the top of Ben Nevis. The proposed line, it is understood, will leave the West Highlands at Nevis Bridge, passing through Glen Nevis as far as the gorge, thereafter winding up by the right side of Corrie Eodham until the summit is reached.

## TIN TICKETING.

THE fortnightly ticketing for tin ores was held at Tabb's Hotel, Redruth, on Tuesday. Results:—

Mines	Tons cwt.	Per ton.	Value.
Dolcoath No. 1	14 0	36 15 0	514 10 0
do No. 1a	14 0	36 17 6	516 5 0
do No. 1b	12 0	37 0 0	444 0 0
Wheal Grenville a	20 0	38 5 0	765 0 0
do b	14 0	38 7 6	537 5 0
do No. 2	4 0	24 0 0	96 0 0
Garn Brea and Tincroft 1	13 0	34 12 6	450 2 6
Mines (Limited) 1a	12 0	34 7 6	412 10 0
do No. 2	1 0	24 12 6	24 12 6
Basset Mines (Limited)	20 0	39 5 0	793 0 0
West Kitty	13 0	38 15 0	503 15 0
East Pool a	6 0	25 5 0	151 10 0
do b	6 0	25 15 0	154 10 0
do No. 2	1 0	10 7 6	10 7 6
Phoenix United	11 0	36 15 0	401 5 0
do No. 2	1 0	27 15 0	27 15 0
Killifreth	9 0	36 17 6	331 17 6
Wheal Kitty	9 0	39 5 0	353 5 0
South Condurrow	5 0	38 7 6	191 17 6

The Ryans Ores.	185 0	£6674 7 6
No. 1	7 1/2	42 12 6
No. 2	26 1/2	43 0 0
No. 2a	26 1/2	43 5 0
No. 3	9 1/2	41 12 6

254 1/2 £9664 9 4  
AVERAGE PRICE PER TON, £35 1s. 6d.  
AVERAGE PRICES PER TON.

July 14	£36 13 6	August 25	£35 18 2
July 28	35 10 2	September 8	35 1 6
August 11	36 4 9		

Carvedras	Tons.	£ s. d.
Chyandour	41 1/2	1625 6 3
Williams	65 1/2	2563 2 6
Redruth	38 1/2	1420 3 9
Penpoll	11 1/2	395 12 6
Cornish	13 1/2	460 10 7
	84 1/2	3194 13 9
254 1/2		£9664 9 4

WITWATERSRAND DEEP (LIMITED).—The next ordinary general meeting of shareholders in the above-named company will be held at Johannesburg, on November 12. A special general meeting will also be held on the same day, and at the same time for the purpose of altering Clause 122 of the Articles of Association.

THE MYSORE GOLD MINING COMPANY (LIMITED) have sold the gold obtained during the month of July last, which realised £35,374 5s. 2d.

## WANTED.

\* Prepaid Advertisements are inserted in this column at the rate of 8d. per line, with a minimum charge of 4s.

### CAPITAL.

FIRMS of GOOD STANDING, desirous of increasing their Working Capital, may OBTAIN SAME by having their own Acceptances Discounted.  
Address, "C. 101," care of EMMISON'S Advertising Offices, Manchester.

### GOLD COAST MINING & TIMBER CONCESSIONS.

ANY PERSONS having LANDED PROPERTY on the Gold Coast, and wishing to have it Inspected, Surveyed, and Reported upon, can communicate with  
J. B. ESUMAN-GWIRA, Civil and Mining Engineer, Ass. M.S.E., Cape Coast Castle, Gold Coast.

### TIN SMELTER.

WANTED, for Spain, a PRACTICAL MAN experienced in Modern Systems of Smelting. Must be able to SUPERINTEND Building of Furnaces and generally to manage Smelting Department.  
Apply, in first instance by letter, to Messrs. BOWEN SCOTT and WESTERN (Limited), Broadway Chambers, Westminster, S.W.

### WESTERN AUSTRALIA.

A WELL-KNOWN MINING and CIVIL ENGINEER and certificated MINE MANAGER is now visiting the Gold Fields of Western Australia, and is OPEN to Inspect, Report upon, or Advise as to Mining Properties there. Terms moderate, or might accept the Management of a large undertaking.  
Address, "MINES," care of STREET and Co., 30, Cornhill.

AN AMERICAN MINING ENGINEER desires an ENGAGEMENT with a Company operating in Gold Mining Properties, either as an Examining and Consulting Engineer, or as a Mine Manager. Has had 12 years' experience in Mining, and possesses a good practical knowledge of Milling, Concentrating, and Cyaniding, and is familiar with the Spanish language. Good references. Salary not unreasonable.  
Address, "C. W.," care of Messrs. RICHARDSON and CHADBOURN, 8, Finch Lane, London.

A MINING ENGINEER, proceeding to WEST AUSTRALIA at the end of September, is prepared to UNDERTAKE INSPECTIONS, SURVEYS, &c., and to SURVEY and REPORT on schemes for the surface conservation of water.  
Apply to "R.," MINING JOURNAL Office, 18, Finch Lane, E.C.

MANAGER of Lead and Silver Smelting Works and Sulphate of Copper Manufacturing Works is OPEN to accept APPOINTMENT. Experience combines the smelting of all kinds of gold, silver, and lead-bearing ores and residue; the manufacture of Sulphate of Copper, with the smelting and refining of gold, and silver residues recovered. Qualified Assayer and Analyst.—Address, S. DAW, Thomas Street, Llanelli, South Wales.

WANTED, CAPITAL for GOLD MINING PURPOSES for any person interesting themselves. A big thing can be presented.  
For particulars, address F. N. MAY, 187, East Main Street, Rochester, N.Y., U.S.A.

## TO LET.

\* Prepaid Advertisements are inserted in this column at the rate of 8d. per line, with a minimum charge of 4s.

TO LET, to principals only, a SLATE QUARRY on Hendre Abergynolwyn Estate, adjoining the Abergynolwyn Slate Quarries, Towy, Merioneth.  
Address, Rev. G. H. G. PUGH, Mellor Vicarage, Blackburn.



## BOARD OF TRADE RETURNS.

## AUGUST TABULAR STATEMENT.

Specially compiled for "The Mining Journal" from the Board of Trade Returns.

THE Returns for August show that the Imports amounted to £32,472,522, a decrease of £2,114,774, and that the Exports totalled £20,301,568, a decrease of £179,929, compared with the corresponding month last year. For the eight months ended August 31, the Imports were £263,286,215, an increase of £2,326,585, and the Exports £165,539,073, an increase of £1,480,578 compared with the corresponding period of 1895. The Exports of Foreign and Colonial Merchandise show a decrease of £1,995,412 for the month, and £2,798,142 for the eight months, the totals being £4,199,230 and £3,412,765 for the one and eight months respectively.

## EXPORTS:—SUMMARY OF INCREASES AND DECREASES.

PRINCIPAL AND OTHER ARTICLES	QUANTITIES		VALUES.	
	INCREASE.	DECREASE.	INCREASE.	DECREASE.
Raw Materials:				
Coal and Patent Fuel ... Tons	—	143,235	£	113,778
Coal, &c., shipped for steamers' use ... Tons	—	25,934	—	—
Metals:				
Brass, and manufactures of	703	—	4,723	—
Copper, unwrought and wrought ... Cwts.	—	30,597	—	51,572
Hardware and cutlery ...	—	—	3,696	—
Iron, unwrought and wrought ... Tons	—	—	2,681	—
Lead, pig, rolled, &c. ...	—	291	208,388	1,464
Plate, and plated gilt wares & telegraph wires, &c. ... Cwts.	—	—	35,681	—
Tin, unwrought ... Cwts.	—	—	6,182	—
Zinc or Spelter ...	—	—	2,226	—
Other Articles ...	—	—	1,113	—
Total ...	—	—	202,615	—
Machinery:				
Steam engines ...	—	—	20,586	—
Other descriptions ...	—	—	4,810	—
Total ...	—	—	25,396	—
ALKALI ... Cwts.	—	15,857	—	34,995
CEMENT ... Tons	—	15,421	—	21,122
PRODUCTS OF COAL ...	—	—	1,394	—

## EXPORTS:—BRITISH AND IRISH PRODUCE.

PRINCIPAL AND OTHER ARTICLES	QUANTITIES.		VALUES.	
	Month ended Aug. 31.	Month ended Aug. 31.	Month ended Aug. 31.	Month ended Aug. 31.
Metals and Articles Manufactured therefrom (except Machinery):—				
Brass, and Manufactures of, not being Ordnance ...	8,559	9,264	33,711	30,437
Copper: Unwrought, in Ingots, Casts, or Slabs, and Precipitated ...	—	—	—	—
To Germany ...	20,657	7,593	46,560	12,693
"Holland ...	11,994	11,565	26,998	23,397
"Belgium ...	3,463	2,600	7,052	6,551
"France ...	9,403	1,345	21,714	3,394
"Italy ...	1,070	2,001	2,452	4,800
"British East Indies ...	205	12	486	33
"Other countries ...	10,440	3,635	22,513	9,713
Total ...	57,242	28,791	128,085	71,641
Wrought, or Manufactures, unenumerated:				
To Sweden and Norway ...	1,914	1,721	5,779	5,504
"Germany ...	300	1,87	1,449	3,876
"Turkey ...	2,485	2,014	8,751	6,166
"Egypt ...	2,169	1,203	5,472	3,488
"Brazil ...	1,833	1,307	5,857	4,611
"British East Indies ...	3,435	2,032	5,794	5,794
"Australia ...	681	1,791	8,018	5,587
"Other countries ...	6,58	10,076	18,551	31,783
Total ...	18,930	21,405	54,109	65,509
Mixed or Yellow Metal:				
To China and Hong Kong ...	1,179	386	2,236	1,045
"British East Indies ...	7,730	6,543	15,968	15,115
"Other countries ...	7,283	4,002	16,413	12,923
Total ...	16,192	11,731	35,017	29,089
Total of Copper ...	92,324	61,527	217,811	165,639

Hardware and Cutlery ...	—	—	160,427	184,123
Implements and Tools, and parts thereof ...	—	—	101,178	103,959

Iron and Steel: Pig-iron:				
To Russia ...	17,649	8,079	39,590	19,010
"Sweden and Norway ...	4,928	4,889	11,244	10,720
"Denmark ...	901	907	1,885	2,172
"Germany ...	19,548	20,279	40,808	60,225
"Holland ...	12,536	15,640	26,573	35,618
"Belgium ...	3,539	9,029	10,638	23,322
"France ...	2,467	4,085	5,019	10,514
"Portugal, Azores, & Madeira ...	2	281	479	641
"Spain and Canaries ...	167	565	239	2,339
"Italy ...	11,621	15,080	24,631	37,180
"United States ...	2,745	3,941	20,244	21,005
"Australia ...	1,125	2,235	4,852	6,934
"British North America ...	775	1,724	7,301	5,110
"Other countries ...	5,767	8,001	18,632	19,184
Total ...	88,012	102,436	208,248	251,902

Bar, angle, bolt, and rod	12,375	14,409	70,710	87,954
Half-rod of all sorts	46,945	77,912	114,161	243,292
Wire, iron and steel &c.	3,466	4,506	56,328	72,461
Hoops, plates, boiler plates, &c.	11,979	11,573	100,093	77,353
Galvanized sheets	17,245	16,348	190,246	191,814
Cast and wrought iron, &c.	21,435	26,043	295,453	341,050
Old, for re-manufacture	6,391	8,770	17,742	73,776
Steel, unwrought	15,777	22,211	160,717	126,400
Black plates for tinning	5,496	3,459	25,026	34,088
Manufactures of steel, or of iron and steel combined	2,054	2,163	53,139	51,655
Total of iron and steel (including tin plates and sheets) ...	259,414	311,596	1,708,721	1,917,109

Tin Plates and Sheets:				
To Russia ...	36	2,688	431	31,016
"Germany ...	284	1,397	3,437	16,250
"Holland ...	368	654	4,096	8,577
"France ...	577	921	7,026	11,216
"Portugal, Azores, and Madeira ...	850	187	10,040	2,050
"Italy ...	90	307	1,145	2,475
"Roumania ...	404	260	4,703	3,903
"United States ...	25,321	8,814	264,489	96,373
"Brazil ...	325	421	2,495	4,424
"Argentine Republic ...	347	174	2,826	1,708
"British East Indies ...	632	647	7,230	7,267
"Australia ...	1,112	1,608	11,430	19,713
"British North America ...	678	838	9,140	8,373
"Other countries ...	1,622	1,818	19,315	19,978
Total ...	30,943	20,726	350,648	232,524

Lead: Pig Sheet, Piping, and Manufactures:				
To Russia ...	694	440	7,410	9,543
"Germany ...	168	63	1,773	825
"China and Hong Kong ...	4	26	40	331
"Japan ...	89	260	1,141	2,795
"United States ...	320	4	3,337	64
"British East Indies ...	372	448	5,867	8,322
"Australia ...	39	102	507	1,443
"British North America ...	207	71	2,329	965
"Other countries ...	756	602	9,023	7,507
Total ...	2,446	2,354	31,459	39,985

## BRITISH AND IRISH PRODUCE—Continued.

PRINCIPAL AND OTHER ARTICLES	QUANTITIES.		VALUES.	
	Month ended Aug. 31.	Month ended Aug. 31.	Month ended Aug. 31.	Month ended Aug. 31.
Plate and Plated Gilt Wares: Telegraphic Wires, & apparatus connected therewith ...	—	—	29,727	27,358
Tin, Unwrought:				
To Russia ...	2,022	2,188	6,830	7,791
"Sweden and Norway ...	354	354	1,183	1,153
"Germany ...	513	948	1,703	2,997
"France ...	1,259	1,382	4,297	4,251
"Turkey ...	392	768	1,340	2,478
"United States ...	—	202	—	6.5
"British North America ...	403	543	1,394	1,787
"Other countries ...	2,660	3,580	9,206	11,463
Total ...	7,608	10,037	25,993	32,175
Zinc or Spelter: Unwrought and Wrought ...	17,570	13,510	12,074	9,848
Total of Principal Articles ...	—	—	2,350,089	2,553,817
other Articles ...	—	—	67,415	66,304
Total of Metals and Articles Manufactured therefrom (except Machinery) ...	—	—	2,417,504	2,620,119
Alkali ...	Tons.	Tons.	£	£
Cement ...	479,220	323,363	124,958	89,879
Products of coal (including paraffin, petroleum, &c.) ...	40,638	23,277	65,452	42,350
Total ...	—	—	89,763	105,157

PRINCIPAL AND OTHER ARTICLES	QUANTITIES.		VALUES.	
	Month ended Aug. 31.	Month ended Aug. 31.	Month ended Aug. 31.	Month ended Aug. 31.
Mining: (Not Steam Engines):				
To Countries in Europe ...	£ 1,884	£ 1,907	£12,079	£19,212
"United States ...	375	—	1,923	1,189
"Countries in South America ...	873	3,071	17,529	28,142
"British Possessions in S. Africa ...	41,631	22,139	285,540	328,294
"East Indies ...	4,203	5,155	25,074	39,815
"Australia ...	7,400	31,674	46,358	197,821
"Other Countries ...	6,102	6,232	32,397	34,231
Total ...	62,448	78,378	420,923	708,605
Total of Machinery other than Steam Engines ...	1,033,085	1,017,895	7,943,368	8,943,689
Total of Steam Engines ...	244,297	223,711	1,767,730	2,167,505
Total of Machinery and Mill Work ...	£1,277,382	£1,241,606	£9,711,098	£11,111,174

## EXPORTS OF FOREIGN AND COLONIAL MERCHANDISE.

PRINCIPAL ARTICLES.	QUANTITIES.		VALUES.	
	Month ended Aug. 31.	Month ended Aug. 31.	Month ended Aug. 31.	Month ended Aug. 31.
Copper:				
Unwrought and part wrought	1,258	849	58,807	35,389
Iron and Steel:				
Bar, angle, bolt, and rod	2,206	1,222	17,739	9,040
Steel, unwrought	163	523	1,862	4,167
Manufactures:				
Orders, beams, and pillars	183	73	922	851
Unenumerated ... Cwts.	59,231	48,223	36,401	53,361
Petroleum ...	120,613	144,000	5,991	4,752
Quicksilver ...	238,107	135,564	22,313	11,064
Saltpetre ...	1,548	3,535	1,376	2,569
Tin, in blocks, ingots, bars, or slabs ...	38,501	36,970	145,973	112,480

## IMPORTS.

## SUMMARY OF INCREASES AND DECREASES.

PRINCIPAL AND OTHER ARTICLES.	QUANTITIES.		VALUES.	
	Increase.	Decrease.	Increase.	Decrease.
Metals:				
COPPER: Ore ... Tons	3,654	—	12,918	—
Regulus ...	2,771	—	94,102	—
Unwrought and part wrought ...	2,453	—	124,703	—
IRON: Ore ...	15,453	—	—	975
Steel, unwrought ...	1,178	1,781	13,877	13,753
LEAD: Pig and sheet ...	—	657	—	874
FRUITES OF IRON OR COPPER ...	—	13,474	—	24,671
QUICKSILVER ...	—	99,238	—	9,552
SILVER ORE ...	—	—	—	32,538
TIN, in blocks, &c. ... Cwts.	23,156	—	58,878	—
ZINC, crude ... Tons	1,562	—	53,891	—
OTHER ARTICLES ...	—	—	—	809
Total ...	—	—	339,223	82,196
Chemicals:				
ALKALI ... Cwts.	—	5,844	—	1,569
BRIMSTONE ...	—	44,773	—	6,330
IRON MANUFACTURES:				
Beams, girders, &c. ... Tons	—	570	—	2,894
Unenumerated ... Cwts.	20,919	—	81,282	—
ZINC MANUFACTURES ...	—	6,071	—	2,710

## FOREIGN AND COLONIAL PRODUCE.

PRINCIPAL AND OTHER ARTICLES.	QUANTITIES.		VALUES.	
	Month ended Aug. 31		Month ended Aug. 31.	
	1895.	1896.	1895.	1896.
Copper:	Tons.	Tons.	£	£
ore:—From Spain ...	1,364	424	5,443	2,122
" Italy ...	850	600	2,303	3,000
" United States ...	79	56	1,580	1,400
" Venezuela ...	—	—	—	—
" Chili ...	218	457	5,181	4,560
" Cape ...	1,452	1,503	14,520	15,030
" British W. America ...	6,813	11,465	16,394	27,701
" Other countries ...	575	550	8,507	6,830
Total ...	11,401	15,056	47,825	60,743
Regulus and Precipitate:				
From Portugal ...	60	—	1,800	—
" Spain ...	3,152	4,688	82,153	102,751
" United States ...	456	1,379	15,173	42,019
" Chili ...	—	149	—	3,745
" Other countries ...	2,733	2,956	35,897	76,630
Total ...	6,401	9,172	133,023	227,125
Unwrought and part Wrought:				
From United States ...	342	3,153	16,718	151,603
" Chili ...	1,396	370	64,496	17,627
" Australasia ...	370	822	15,531	40,325
" Other countries ...	546	762	24,660	36,553
Total ...	2,654	5,107	121,405	246,108
Iron and Steel:				
From Spain ...	351,929	400,110	223,684	280,940
Iron ore: Other countries ...	87,836	50,108	85,219	4,158
Total ...	439,765	450,218	308,903	307,998
Iron, bar, angle, bolt, and rod	2,816	6,339	63,693	49,940
Steel, unwrought ...	910	2,028	7,777	21,154
Lead, pig and sheet ...	15,744	15,087	164,296	165,170
Wrought of iron or copper				
sulphur ...	48,182	34,718	88,430	60,759
	Lbs.	Lbs.		
Quicksilver ...	101,510	2,272	9,872	320
Silver Ore ...	—	—	151,047	119,809
Iron, in blocks, ingots, bars, or slabs:	Cwts.	Cwts.		
From Straits Settlements ...	54,320	78,470	172,783	237,340
" Australasia ...	9,070	8,100	29,541	24,669
" Other countries ...	5,238	5,264	15,787	15,000
Total ...	68,628	91,834	218,111	277,009
Crude, in crude in cakes ... Tons	4,415	5,977	68,947	102,638
Total of principal articles ...	—	—	1,379,939	1,637,673
" other articles ...	—	—	199,337	199,588
Total of metals ...	—	—	1,579,276	1,838,261



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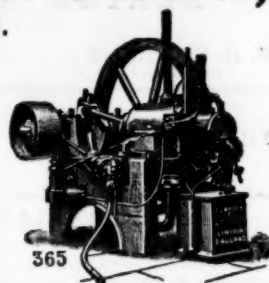
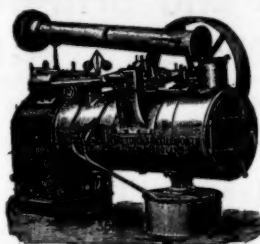
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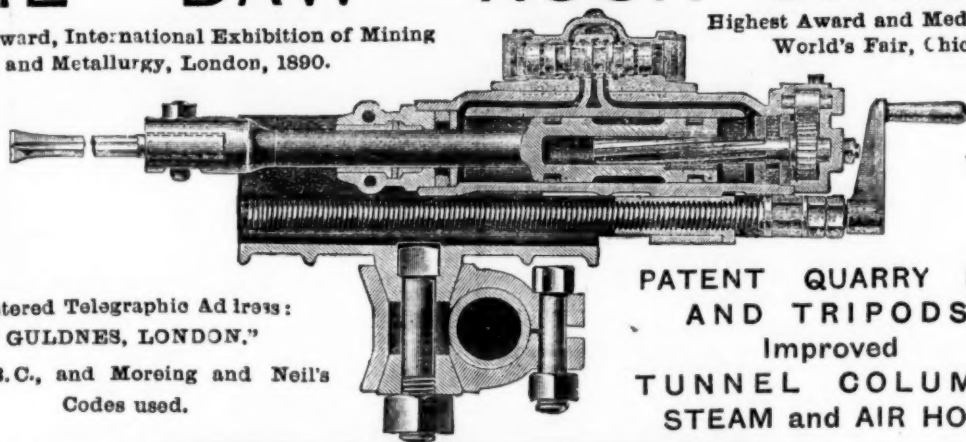
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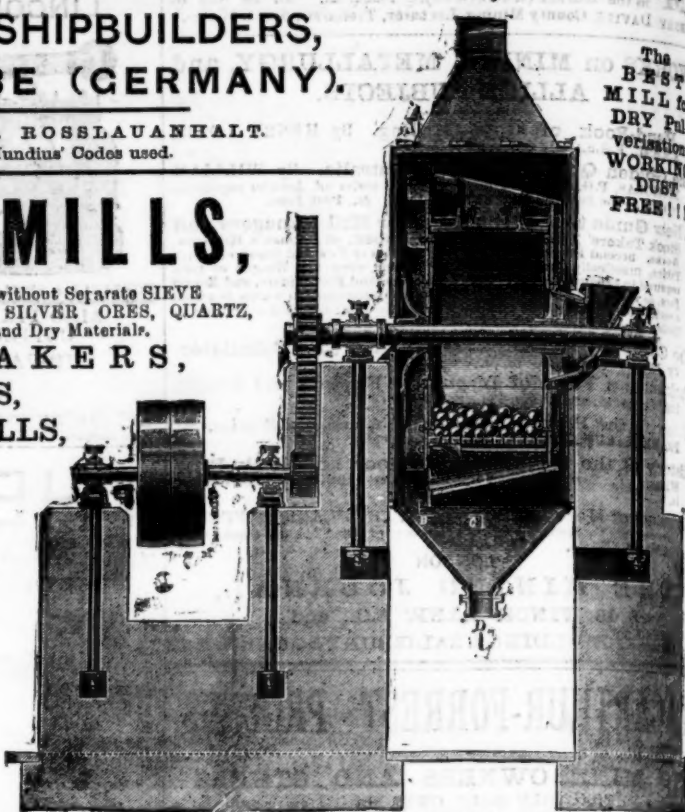
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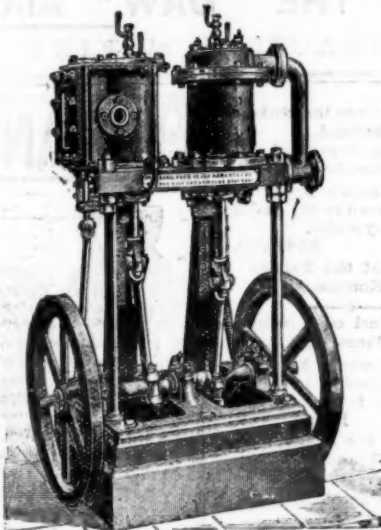
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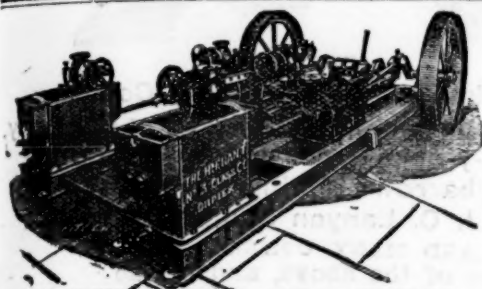


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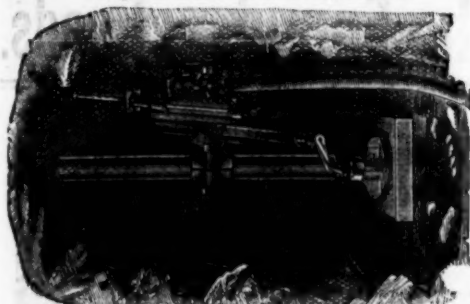
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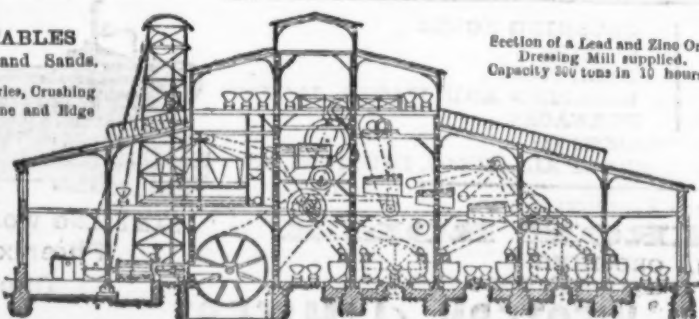
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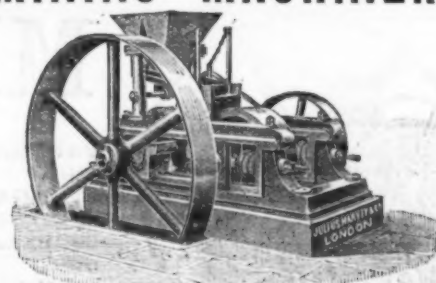
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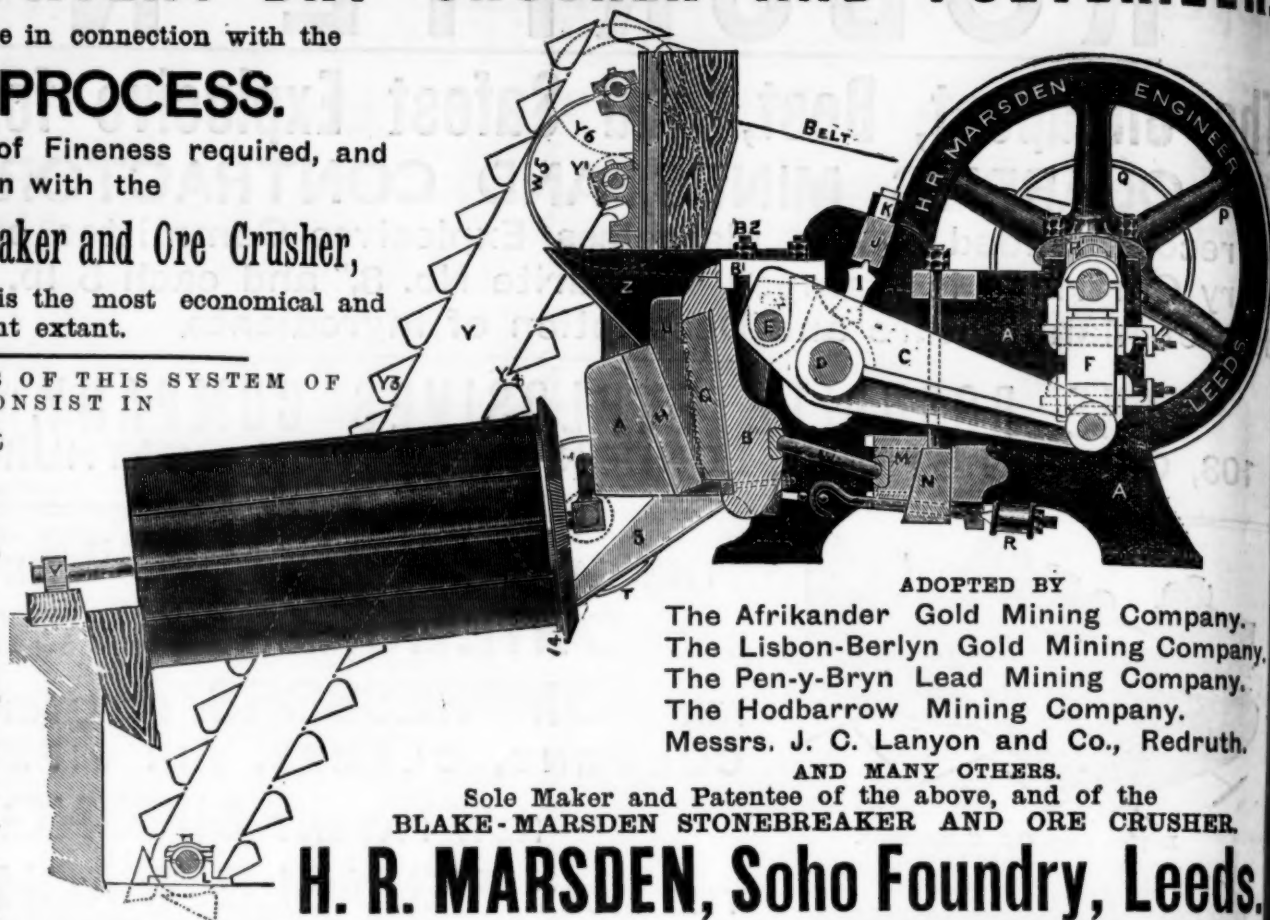
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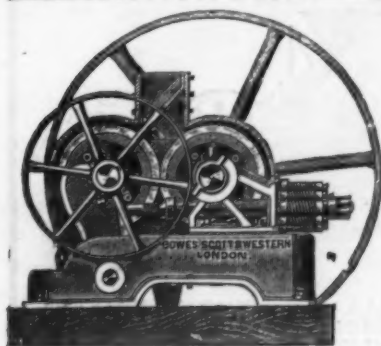
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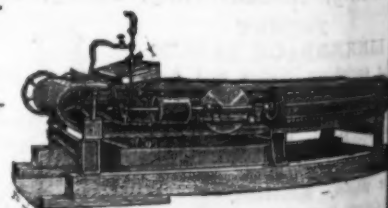
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